

<p><b>SALSA DE CHORO.</b>  <i>Penicillium typhoid.</i>          var.)</p>	<p><b>MARCA DE REGO.</b>  <i>(Eleusine Cereale.)</i></p>
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1274.

KAWHIOH KAKUH, ITALIAN MILLET. ( <i>Setaria italica</i> .)			GRAM, CHANA, CHHOLA, KADALA OR SUNDAG. ( <i>Oryza sativa</i> .)		
Present return.	Next preceding year.	Corresponding year of last year.	Present return.	Next preceding year.	Corresponding year of last year.
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
...	...	...	...	...	...
...	...	...	9 8	8 8	8 8
...	...	...	10 5	10 8	9 11
18 0	16 0	19 0	19 0	19 8	15 6
14 0	12 4	16 0	18 0	18 0	16 0
...	...	...	16 8	16 0	16 0
16 0	16 0	...	20 8	20 0	16 0
...	...	...	20 8	20 8	18 0
...	...	...	19 0	19 0	16 0
...	...	...	18 11	19 4	27 0
...	...	...	21 0	20 3	16 0
...	...	...	17 12	17 12	16 4
			Large { 25 0 14 12 } Small { 16 0 16 0 } 14 0		
...	...	...	21 0	21 0	...
...	...	...	14 0	14 0	112 8
			Bri or kalsi. 16 12 16 12 18 2 Chhola. 14 6 14 0 112 0 Bri. 16 0 17 0 11 0		
...	...	...	18 0	14 0	...
...	...	...	19 5	18 12	12 4
...	...	...	14 0	14 0	12 8
...	...	...	12 8	13 0	12 0
...	...	...	15 12	14 1	10 11
...	...	...	15 6	16 0	18 0
...	...	...	12 0	12 0	9 0

Station Bazaar of the Districts of Bengal on the 31st August 1902—*concluded.*

												WHOLESALE PRICES PER MAUND OF 40 SEERS.			DISTRICTS.	Number.
INDIAN-CORN OR MAIZE. (Zea mays.)			ARABIC OR TURK, CADJAN PEA. (Cajanus indica.)			SALT.			SALT.							
Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.					
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. A. P.	S. A. P.	S. A. P.					
...	...	...	...	...	...	V 10 0	9 0	9 0	13 14 0	3 12 0	4 8 0	BENGAL—continued			CHITTAGONG DIVISION.	
...	...	...	...	...	...	W 9 0	8 8	9 0	14 2 0	4 4 0	4 8 0	Tippera.				21
...	...	...	...	...	...	X 11 0	10 0	9 0	13 8 0	3 6 0	3 14 0	Meakhal.				25
...	...	...	5 0	8 0	8 10	...	...	...	...	...	...	Chittagong.				26
...	...	...	...	...	...	Y 10 12	10 12	10 8	11 0	3 10 0	3 12 0	BHAIR.			LAKSHMIPUR DIVISION.	
21 0	21 0	16 8	17 0	18 0	16 0	...	...	...	...	...	...	Palua.				27
18 0	18 0	15 4	15 12	15 0	13 8	Z 11 0	11 4	10 8	9 0	3 9 0	3 15 0	Gaya.				28
...	...	...	12 0	14 0	11 0	a 10 0	10 0	10 8	14 0	4 0 0	3 18 0	Shahabad.				29
20 0	20 0	15 0	15 8	14 0	12 0	b 11 0	11 0	10 8	10 8	3 10 2	3 13 0	Saran.				30
22 0	22 0	19 8	22 0	22 0	19 0	c 10 8	10 8	10 0	13 13 0	3 18 0	4 0 0	Chandpur.				31
...	...	...	...	...	...	d 10 0	10 0	9 12	13 0	4 0 0	4 0 0	Moulvibazar.				32
22 0	22 0	22 0	14 4	14 4	13 3	e 11 0	11 0	11 0	13 10 0	3 19 0	3 10 0	Dacca.				33
20 0	20 0	18 14	11 0	11 0	17 15	f 10 8	10 8	10 8	12 14 6	3 14 6	3 6 6	Moulvibazar.				34
21 8	19 0	18 4	12 10	12 10	10 8	g 10 12	10 12	10 4	13 10 0	3 10 0	3 14 0	Moulvibazar.				35
...	...	...	10 0	10 0	8 0	h 10 0	10 0	10 0	14 0 0	4 0 0	4 0 0	Purulia.			SHAHADAT DIVISION.	
...	...	...	13 0	13 0	10 0	i 10 0	10 0	9 8	13 11 0	3 14 0	4 0 0	Moulvibazar.				36
...	...	...	15 0	18 0	10 0	j 10 8	10 8	10 0	13 10 0	3 10 0	3 12 0	Boulton Pargana.				37
...	...	...	15 1	14 12	12 7	k 12 0	11 0	13 0	13 0 0	3 0 0	3 0 0	Onissa.			CHITTAGONG DIVISION.	
...	...	...	10 12	10 0	10 0	l 11 0	11 4	10 8	13 8 0	3 7 0	3 11 0	Chittagong.				38
...	...	...	15 0	14 8	...	m 8 0	8 0	...	...	...	...	Angul.				39
...	...	...	9 3	9 3	7 4	n 13 0	13 0	13 4	13 1 0	3 1 0	2 14 6	Puri.				40
14 8	14 8	14 0	9 8	9 8	9 8	...	...	...	...	...	...	CHOTA NAAGPUR			CHOTA NAAGPUR DIVISION.	
17 0	...	13 8	9 8	9 8	9 8	...	...	...	...	...	...	Kharibagh.				41
13 8	12 16	10 11	11 4	11 4	8 4	...	...	...	...	...	...	Ranchi.				42
...	...	...	11 8	12 9	10 0	...	...	...	...	...	...	Palamu.				43
...	...	...	10 0	10 0	8 0	...	...	...	...	...	...	Manbhum.				44
...	...	...	10 0	10 0	8 0	...	...	...	...	...	...	Singbhum.				45

g. In the subdivisions the retail prices of salt per rupee are—Banks 10 seers; Madhipura 10 seers; Sapat 10 seers.  
h. In the subdivisions the retail prices of salt per rupee are—Kishanganj 9 seers; Araria 9 seers.  
i. At Bahia Nawabganj the retail price of salt is 10 seers per rupee.  
j. In the subdivisions the retail prices of salt per rupee are—Deoghur 10 seers (panga); Godda 10 seers; Jamtara 11 seers; Pargana 11 seers (Karkatoli); Rajmahal 11 seers.  
k. In the subdivisions the retail prices of salt per rupee are—Jajpur 10 seers 10 chittacks (panga); Khandrapara 10 seers (panga).  
l. At Bhadrak the retail price of salt is 10 seers per rupee.  
m. In the districts in the interior of the district the retail prices of salt per rupee are—Bankpur 9 seers; Bimipara 9 seers.  
n. At Xharid the retail price of salt is 13 seers per rupee.  
o. At Gohindpur the retail price of salt is 10 seers 10 chittacks per rupee.

Published for general information.

W. C. MACPHERSON,

## PRICES-CURRENT (wholesale) of Food-grains, Firewood, &amp;c.

No.	Name.	RICE (BEST SORT).			COMMON RICE (more chaul).			WHEAT ( <i>Triticum aestivum</i> ).			BARLEY ( <i>Hordeum vulgare</i> ).		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Calcutta	5 4 0	5 4 0	5 4 0	3 12 0	3 12 0	4 4 0	3 8 0	3 8 0	3 8 0	2 0 0	2 0 0	2 0 0
2	Burdwan	5 0 0	5 0 0	4 12 0	3 11 0	3 11 0	3 3 0	---	---	---	---	---	---
3	Midnapore	4 0 0	4 0 0	4 4 0	3 3 0	3 3 0	3 10 0	---	---	---	---	---	---
4	Patna	3 10 0	3 10 0	3 0 0	3 5 0	3 3 0	3 0 0	2 8 0	2 8 0	2 10 0	---	---	---
5	Rangpur	5 0 0	5 0 0	6 8 0	3 12 0	3 12 0	4 0 0	3 12 0	3 12 0	3 12 0	---	---	---
6	Dacca	4 0 0	4 2 0	4 12 0	3 4 0	3 4 0	4 8 0	3 4 0	3 4 0	3 3 0	2 0 0	2 0 0	2 12 0
7	Chittagong	---	---	---	3 8 0	3 4 0	3 10 0	---	---	---	---	---	---
8	Patna	3 12 0	3 12 0	4 2 0	3 10 0	3 10 0	3 5 0	2 12 0	2 12 0	3 0 0	2 1 0	2 0 0	2 3 0
9	Mumfarpur	5 0 0	5 0 0	4 7 0	3 6 0	3 6 0	3 6 0	2 12 0	2 12 0	3 3 0	2 0 0	2 0 0	1 12 0
10	Bhagalpur	4 3 0	4 3 0	4 15 0	3 8 0	3 8 0	3 8 0	2 14 0	2 14 0	3 1 0	2 0 0	2 0 0	2 0 0
11	Cuttack	4 4 0	4 4 0	3 14 0	3 15 0	3 15 0	2 14 0	3 3 0	3 3 0	3 6 0	---	---	---
12	Banshi	4 10 0	4 10 0	4 8 0	3 12 0	3 12 0	3 1 0	4 3 0 to 5 0 0	3 13 0 to 5 5 0	3 13 0 to 5 0 0	2 13 0	2 13 0	2 13 0

CALCUTTA,

The 8th September 1902.

JAB OR CHOLUM ( <i>Sorghum vulgare</i> ).			BAJRA OR GURBU ( <i>Pennisetum typhoides</i> ).			MARVA OR BADI ( <i>Echinochloa crusgalli</i> ).			GRAM, ORANA, CHOLA, KADALAY, OR SUNAGA ( <i>Cicer arvensis</i> ).		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
15	16	17	18	19	20	21	22	23	24	25	26
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
2 0 0	2 12 0	2 4 0	2 8 0	2 8 0	3 5 0	...	...	...	2 8 0	2 8 0	2 12 0
...	...	...	...	...	...	...	...	...	2 6 0	2 7 0	2 12 0
...	...	...	...	...	...	...	...	...	2 8 0	2 10 0	3 0 0
...	...	...	...	...	...	...	...	...	2 10 0	2 10 0	3 6 0
...	...	...	...	...	...	...	...	...	2 8 0	2 8 0	3 2 0
...	...	...	...	...	...	...	...	...	4 0 0	4 0 0	3 4 0
...	...	...	...	...	...	...	...	...	3 6 0	3 4 0	3 12 0
White. 2 7 0 Kalam. 1 15 0	2 0 0	2 7 0	...	...	...	...	...	...	2 1 0	2 0 0	2 10 0
...	...	...	...	...	...	1 18 0	1 18 0	2 5 0	2 0 0	2 0 0	2 1 0
...	...	...	...	...	...	...	...	...	2 4 0	2 4 0	2 10 0
...	...	...	...	...	...	...	...	...	2 6 3	2 7 0 Biri or kalni.	2 18 0
...	...	...	...	...	...	...	...	...	3 8 2	3 1 0	3 6 3

PRICE PER MAUND

INDIAN-CORN DE MAIZE (Zea mays).			ARHAR DAL OR TUR - CADJAN PEA (Cajanus indicus).			LINSEED.			MUSTARD AND RAPSEED.		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
27	28	29	30	31	32	33	34	35	36	37	38
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
2 2 0	2 4 0	2 12 0	4 4 0	4 0 0	4 0 0	6 12 0	6 12 0	7 4 0	5 0 0	4 12 0	4 12 0
...	...	...	3 8 0	3 8 0	3 12 0	...	...	...	4 6 0	4 12 0	4 0 0
...	...	...	4 0 0	3 14 0	4 12 0	5 8 0	4 8 0	5 8 0	4 10 0	4 10 0	4 0 0
...	...	...	4 5 0	4 5 0	5 5 0	4 8 0	4 8 0	5 0 0	4 12 0	4 12 0	4 12 0
...	...	...	4 5 0	4 5 0	5 5 0	4 8 0	4 8 0	5 0 0	4 14 0	4 14 0	4 14 0
...	...	...	4 0 0	4 0 0	4 0 0	...	...	...	6 4 0	6 4 0	6 4 0
...	...	...	4 0 0	4 0 0	4 0 0	...	...	...	4 8 0	4 8 0	4 8 0
...	...	...	4 12 0	4 8 0	5 4 0	...	...	...	4 8 0	4 8 0	4 8 0
1 14 0	1 14 0	2 0 6	2 5 0	2 8 0	2 8 0	6 0 0	5 12 0	5 10 0	4 6 0	4 3 0	5 0 0
1 16 8	1 16 8	2 1 6	2 13 8	2 10 6	2 16 3	...	...	...	...	...	...
1 14 0	2 0 6	2 3 0	3 2 0	3 2 0	3 12 6	6 0 0	6 0 0	...	4 6 0	4 6 0	4 6 0
...	...	...	2 7 0	2 10 0	3 0 0	...	...	...	4 8 0	4 8 0	4 8 0
...	...	...	6 2 6	6 2 6	6 11 0	...	...	...	4 8 0	4 8 0	4 8 0
...	...	...	6 10 0	7 4 4	6 2 8	6 10 0	6 10 0	5 0 0	5 0 0	5 0 0	5 0 0

STANDARD SERIES.

TIL OR FINEST SEED.			SUGAR (RAW).			COTTON, CLEANED.			JUVE		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
30	40	41	42	43	44	45	46	47	48	49	50
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
4 12 0	4 8 0	5 0 0	4 4 0	4 4 0	4 0 0	15 0 0	15 0 0	17 0 0	5 4 0	5 4 0	5 4 0
...	...	...	4 0 0	3 12 0	4 4 0	10 0 0	20 0 0	17 12 0	...	...	...
...	...	...	{ 3 4 0 3 8 0 }	{ 3 4 0 3 8 0 }	{ 3 8 0 4 0 0 }	20 0 0	20 0 0	21 0 0	...	...	...
...	...	...	3 10 0	3 8 0	4 8 0	21 0 0	21 0 0	20 0 0	5 2 0	4 14 0	5 0 0
...	...	...	4 0 0	4 0 0	3 4 0	...	...	...	4 0 0	4 0 0	4 12 0
...	...	...	4 2 0	4 0 0	5 12 0	...	...	...	4 8 0	4 8 0	5 0 0
...	...	...	5 0 0	4 12 0	5 8 0	14 8 0	14 8 0	14 0 0	...	...	...
5 10 0	5 12 0	5 0 0	2 12 0	2 8 0	3 8 0	15 0 0	16 0 0	16 0 0	4 4 0	4 4 0	3 0 0
...	...	...	2 10 0	2 5 0	3 1 3	...	...	...	...	...	...
...	...	...	4 1 0	4 1 0	5 5 0	19 0 0	19 0 0	18 0 0	...	...	...
4 1 0	4 1 0	4 0 0	4 8 0	4 8 0	4 8 0	20 0 0	20 0 0	22 0 0	...	...	...
...	...	...	4 0 0	{ 3 10 0 4 0 0 }	{ 4 8 0 5 0 0 }	20 0 0	22 0 0	22 12 0	...	...	...

GHI (CLARIFIED BUTTER).			TOBACCO LEAF.			HIDES (COW).			GRASS.		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
51	52	53	54	55	56	57	58	59	60	61	62
Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.	Ra. A. P.
30 0 0	39 0 0	40 0 0	7 0 0	2 0 0	0 0 0	250 0 0	250 0 0	300 0 0	1 0 0	1 0 0	0 13 3
30 0 0	30 0 0	41 0 0	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...
30 8 0	30 8 0	41 8 0	5 8 0	5 8 0	5 8 0	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...
50 0 0	53 0 0	53 0 0	6 8 0	6 8 0	7 0 0	...	...	...	...	...	...
38 0 0	36 0 0	42 0 0	10 0 0	10 0 0	0 0 0	...	...	...	0 2 6	0 2 6	0 2 4
40 0 0	40 0 0	46 0 0	7 8 0	7 8 0	0 0 0	25 0 0	25 0 0	25 0 0	0 3 0	0 3 0	0 3 4
32 8 0	33 0 0	41 0 0	7 8 0	10 0 0	10 0 0	10 8 0	13 8 0	18 8 0	...	...	...
30 0 0	30 0 0	35 0 0	4 0 0	3 8 0	3 0 0	...	...	...	0 4 0	0 4 0	0 4 0
20 1 0	20 1 0	24 5 0	8 0 0	8 0 0	8 0 0	...	...	...	...	...	...
32 0 0	32 0 0	40 0 0	8 0 0	8 0 0	...	...	...	...	...	...	...
34 5 0	33 12 0	37 5 0	4 4 0	4 4 0	4 4 0	25 0 0	25 0 0	25 0 0	0 7 0	0 7 0	0 3 8
30 7 6	32 0 0	36 0 0	6 10 0	6 10 0	6 10 0	1 0 0	1 0 0	1 0 0	...	...	...
35 0 0	37 3 10	40 0 0	13 5 8	13 5 8	18 0 0	1 8 0	2 0 0	1 0 0	0 3 8	0 4 0	0 2 8



the undermentioned *Maria* of Bengal on the 31st August 1902.

BYEAW.			JOAR STALES.			PRICES PER MAUND OF 40 STANDARD BEERS.									MARTS.	
						IRON.			FIREWOOD.			SALT.				
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.		
63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
0 12 0	0 12 0	0 14 0	...	...	...	5 12 0	5 12 0	5 4 0	0 8 0	0 8 0	0 8 0	3 6 0	3 6 0	3 6 0	1. Calcutta.	
0 12 0	0 12 0	0 14 0	...	...	...	...	...	...	0 8 0	0 8 0	0 5 6	3 4 0	3 4 0	3 10 0	2. Burdwan.	
0 4 8	0 4 0	0 10 1	...	...	...	{ 5 12 0 to 4 4 0 }	{ 5 12 0 to 4 4 0 }	{ 4 0 0 to 5 0 0 }	0 4 0	0 4 0	0 4 0	3 8 0	3 8 0	3 11 0	3. Midnapore.	
1 6 0	1 0 0	1 0 0	...	...	...	7 0 0	7 0 0	7 0 0	0 10 0	0 10 0	0 5 0	3 12 0	3 12 0	3 13 0	4. Pabna.	
0 7 0	0 7 0	0 7 0	...	...	...	7 0 0	7 0 0	7 0 0	0 5 0	0 5 0	0 5 0	3 12 0	3 12 0	4 0 0	5. Rangpur.	
...	...	...	...	...	...	6 0 0	6 0 0	6 0 0	0 5 3	0 5 3	0 5 3	3 10 0	3 10 0	4 0 0	6. Dinna.	
...	...	...	...	...	...	4 12 0	4 8 0	5 4 0	...	...	...	3 6 0	3 6 0	3 14 0	7. Chittagong.	
...	...	...	...	...	...	5 0 0	4 0 0	5 0 0	0 7 0	0 7 0	0 6 0	3 11 0	3 10 0	3 13 0	8. Faikha.	
...	...	...	...	...	...	5 11 6	5 11 6	5 11 6	0 4 0	0 4 0	0 4 0	4 0 0	4 0 0	4 0 0	9. Mymensingh.	
...	...	...	...	...	...	5 0 0	5 0 0	5 0 0	0 5 9	0 5 9	0 5 3	3 10 0	3 10 0	3 14 0	10. Bhagalpur.	
2 7 8	0 7 0	0 8 0	...	...	...	4 11 0	4 11 0	4 4 0	0 4 0	0 4 0	0 4 0	3 0 0	3 0 0	3 0 0	11. Cuttack.	
0 0 0	{ 0 6 0 to 0 10 0 }	{ 0 8 0 to 0 10 0 }	...	...	...	5 10 0	5 10 0	5 11 8	0 4 0	0 4 0	0 4 0	4 1 0	4 1 0	4 5 0	12. Ranchi.	

W. C. MACPHERSON,  
Offg. Secretary to the Govt. of Bengal.

## IRRIGATION DEPARTMENT, BENGAL.

*Abstract statement showing assessed Tollage or Earnings on Canals in Bengal classed as Major Works for the month of July 1902, as compared with that of the corresponding month of the previous year.*

CANALS.	TOLLAGE, 1902-1903.		TOLLAGE, 1901-1902.	
	During the month.	To end of the month.	During the month.	To end of the month.
1	2	3	4	5
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
<i>Orissa Circle.</i>				
Taldanda Canal System	1,173 3 6	5,267 3 6	1,063 0 5	3,811 6 11
Kendrapara ditto	2,530 5 5	10,851 14 7	4,343 10 4	18,819 8 5
High Level, Range I	597 2 9	2,438 14 6	1,204 8 0	2,880 13 0
Ditto, " II	147 4 3	512 12 6	186 1 3	556 4 3
Ditto, " III	16 11 3	43 13 0	33 4 0	95 12 3
Jajpur Canal	96 3 0	188 14 0	35 0 0	103 2 9
Total Orissa Circle	4,560 3 2	19,303 8 7	6,865 8 0	26,266 10 7
<i>South-Western Circle.</i>				
Midnapore Canal	4,785 11 6	30,762 9 0	7,504 1 0	34,152 5 9
Hijili Tidal Canal	3,263 15 0	17,221 13 3	4,038 7 6	20,828 4 0
Total South-Western Circle	8,049 10 6	47,984 6 3	11,542 8 6	54,980 9 9
<i>Sone Circle.</i>				
Patna Canal System	859 6 1	2,772 1 7	995 13 0	6,653 13 6
Arrah ditto	334 14 6	2,907 15 9	408 3 0	4,146 2 0
Buxar ditto	149 2 9	1,162 4 3	347 14 6	1,121 8 0
Total Sone Circle	1,343 7 4	6,902 5 7	1,749 14 6	12,221 7 6
GRAND TOTAL	13,953 5 0	74,190 4 5	20,157 15 0	93,468 11 10

## IRRIGATION DEPARTMENT, BENGAL.

*Abstract Statement showing assessed Tollage or Earnings on Canals in Bengal classed as Minor Works and Navigation for the month of July 1902, as compared with that of the corresponding month of the previous year.*

CANALS.	TOLLAGE, 1902-1903.		TOLLAGE, 1901-1902.	
	During the month.	To end of the month.	During the month.	To end of the month.
1	2	3	4	5
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Calcutta and Eastern Canals	15,706 12 0	64,294 14 9	14,454 8 11	57,002 12 0
Tolly's Nala	4,149 12 9	16,621 9 6	4,553 9 3	16,978 10 5
Total	19,856 11 9	80,916 8 3	19,007 12 9	73,981 7 6
Orissa Coast Canal	1,833 12 0	9,172 8 9	3,157 5 3	16,022 12 5
Nadia Rivers	8,429 7 9	21,142 15 9	10,170 7 6	19,800 13 0
GRAND TOTAL	30,179 12 6	1,11,232 0 9	32,341 9 6	1,08,806 1 0

DARJEELING.  
The 5th September 1902.

R. C. KHAN,  
Under-Secy. to the Govt. of Bengal.

SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 10, 1279

GOVERNMENT OF BENGAL, IRRIGATION DEPARTMENT.

Approximate return of traffic on the Circular and Eastern Canals for the week ending Saturday, the 6th September 1902, as compared with the corresponding week of the previous year.

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 6TH SEPTEMBER 1902.			WEEK ENDING SATURDAY, THE 7TH SEPTEMBER 1901.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
		Mds.	Rs.		Mds.	Rs.
Rice and paddy	618	49,926	586	539	35,426	415
Jute	178	81,878*	468	81	24,426†	366
Firewood	88	35,274	851	48	14,550	221
Other articles	645	1,27,694	1,649	340	82,472	967
Total	1,409	2,54,470	3,254	798	1,56,972	1,968

\* Weight by canal measurement, 31,337½ mounds.  
† Ditto ditto, 24,000 ..

## Abstract of the Results of Meteorological Observations taken at the Alipore Observatory in the month of August 1902.

			Inches.	Date.	Hour.
The mean pressure of the month	...	...	29.615		
The average pressure of August from 24 years' registers	...	...	29.598		
The highest pressure in the month	...	...	29.751	21st	10
The lowest pressure in the month	...	...	29.391	24th	16
The range of pressure	...	...	0.360		
			Hours.		
The total number of hours of bright sunshine during the month	...	...	140.9		
The maximum possible number of hours of sunshine	...	...	398.4		
			°		
The mean temperature of the month	...	...	84.0		
The average temperature of August from 24 years' registers	...	...	83.1		
The highest temperature in the month	...	...	94.2	13th	
The lowest temperature in the month	...	...	74.7	11th	
The range of temperature during the month	...	...	19.5		
The mean daily range of temperature	...	...	11.2		
The greatest range of temperature in one day	...	...	15.4	13th	
			Per cent.		
The mean humidity of the month	...	...	86		
The average humidity of August from 24 years' registers	...	...	86		
			Inches.		
The mean vapour tension of the month	...	...	1.002		
The average vapour tension of August from 24 years' registers	...	...	1.002		
The mean cloud proportion of the month	...	...	8.13		
The average cloud proportion of August from 25 years' registers	...	...	8.00		
			Inches.		
The total rainfall of the month	...	...	14.01		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	...	...	12.92		
The average fall of August from 48 years' registers	...	...	13.94		
The greatest fall in 24 hours	...	...	2.71	11th	
			Days.		
The number of rainy days in the month	...	...	16		
The average number of rainy days in August from 24 years' registers (Alipore Observatories)	...	...	19		
			°		
The mean maximum equilibrium temperature of solar radiation during the month	...	...	145.7		
The mean difference of sun and air temperatures	...	...	55.8		
The greatest sun temperature	...	...	156.9	17th	
The greatest excess of sun over air temperature	...	...	66.2	4th	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	...	...	77.1		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	...	...	1.3		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	...	...	3.0	23rd	
			Miles.		
The mean movement of the wind per day	...	...	88.3		
The greatest movement of the wind in one day	...	...	233.0	10th	
The greatest movement of the wind in one hour	...	...	17.0	24th	10 to 11 a.m.
The number of hours with winds from each of the eight points—					
N. 24, N.E. 23, E. 62, S.E. 160, S. 184, S.W. 135, W. 63, N.W. 20, Calm 83.					

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore .003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 0.6 higher; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0.6 higher than the Kew Standard thermometer, which is the standard of reference at the present Observatory.

G. W. KUCHLER,

METEOROLOGICAL OFFICE, GOVT. OF INDIA,  
Alipore (Calcutta), the 8th September 1902.

for Meteorological Reporter to the Govt. of India  
and Director-General of Indian Observatories.

Results of the Meteorological Observations taken at the Alipore Observatory from  
31st August to 6th September 1902.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fabr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
1902.				Inches.	°	°	°	°	°	Inches.	°	%			Inches.	
Aug.	31st	150.9	9.1	29.545	84.3	91.1	12.8	78.3	80.1	0.972	78.4	83	N, ENE and E ...	180	0.26	Partially cloudy, p.
Sept.	1st	153.9	8.0	526	82.7	86.7	8.1	78.6	80.1	995	79.1	80	ENE, E and E by E.	193	0.30	Chiefly cloudy, v, d, p.
"	2nd	145.6	5.7	542	84.0	89.4	11.2	78.2	80.5	998	79.2	84	SE and SSW ...	110	0.30	Partially cloudy, o, p.
"	3rd	150.1	3.5	567	85.1	89.8	10.5	79.3	81.7	1.039	80.4	86	S by W and SE ...	82	0.061	Chiefly cloudy, d.
"	4th	151.7	6.4	578	85.6	92.2	12.4	80.1	81.9	1.040	80.4	85	SE and calm ...	■	0.18	Partially cloudy, p.
"	5th	144.1	0.6	548	84.1	89.1	8.8	80.3	81.0	1.020	79.6	■	SE and E ...	64	0.06	Chiefly cloudy, v, d, t, l.
"	6th	149.0	1.5	564	82.9	87.1	8.1	79.0	79.9	0.983	78.7	87	E and ESE ...	■	0.21	Chiefly cloudy, o, d, p.

The mean pressure of the seven days ... 29.618

The average pressure of the corresponding period for 24 years, Surveyor-General's Office ... 29.646

The total number of hours of bright sunshine ... 29.8

The maximum possible number of hours of sunshine ... 87.6

The mean temperature of the seven days ... 84.1

The average temperature of the corresponding period for 24 years, Surveyor-General's Office ... 83.5

The extreme variation of temperature ... 14.0

The maximum temperature ... 92.2

The highest velocity of the wind in one hour ... 14

The mean relative humidity ... 86

The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office ... 86

The total fall of rain from 31st August to 6th September 1902 ... 1.91

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... 2.48

The total fall from 1st January to 6th September 1902 ... 53.48

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... 50.50

The mean pressure, temperature, &amp;c., are deduced from the traces of the Barograph and Thermograph, and from eye observations.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; d, drizzling rain; p, passing temporary showers; t, thunder; l, lightning.

G. W. KÜCHLER,

for Meteorological Reporter to the Govt. of India  
and Director-General of Indian Observatories.METEOROLOGICAL OFFICE, GOVT. OF INDIA;  
Alipore (Calcutta), the 8th September 1902.

## EASTERN BENGAL STATE RAILWAY.

Abstract of Principal Commodities carried over the Eastern Bengal State Railway during the month of May 1902 as compared with the same month of the previous year.

No.	Commodity.	1901.	1902.	Increase in 1902.	Decrease in 1902.	EXPLANATIONS OF FLUCTUATIONS IN TRAFFIC SUPPLY/DEMAND.
		Tons.	Tons.	Tons.	Tons.	
1	Apparel, including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes.	34	23	13		
2	Coal and coke carried for the Public and Foreign Railways.	20,872	20,774		2,889	
3	Cotton—					
	(1) Raw	171	547		100	
	(2) Manufactured—					
	(a) Twist and yarn, European	237	284		97	
	(b) Ditto, Indian	194	281		167	
	(c) Piece-goods, European	1,586	2,224		637	
	(d) Ditto, Indian	36	47		13	
	(e) Others					
4	Chemicals, excepting saltpetre	30	28		12	
5	Drugs—					
	(1) Intoxicating, other than opium	60	45	15		
	(2) Non-intoxicating—					
	(a) Medicinal preparations					
	(b) Others	64	67			
6	Dyes and Tans—					
	(1) Al (Morinda strobilata)					
	(2) Alizarine and Alizarine dyes					
	(3) Cochineal	17	21		4	
	(4) Indigo					
	(5) Myristicins					
	(6) Tanning extracts					
	(7) Turmeric	274	210	64		
	(8) Others	4	15		4	
7	Fodder—					
	(1) Oats	1,090	717	143		
	(2) Hay, straw and grain	1,583	2,251		1,096	
8	Fruits and vegetables, fresh	431	443		17	
9	Grain and pulses—					
	(1) Grain and pulses	8,144	6,974	1,169		
	(2) Jawar and Bajra					
	(3) Rice in the husk	8,189	9,427		2,238	
	(4) Rice, not in the husk	8,774	7,579		4,195	
	(5) Wheat	1,419	474			
	(6) Do. flour	200	109			
	(7) Others	181	300		40	
10	Hides and skins—					
	(1) Hides of cattle—					
	(a) Dressed or tanned					
	(b) Raw	700	700			
	(2) Skins of sheep and other animals—					
	(a) Dressed or tanned					
	(b) Raw	64	68		16	
11	Horns	13	3	10		
12	Hemp (Ladiao) and other fibres, excluding jute.	134	374		94	
13	Jam—					
	(1) Raw	18,285	10,000	8,285		
	(2) Gummy-lumps and cloth	1,600	1,200			
14	Leather—					
	(1) Unwrought	10	47		37	
	(2) Wrought, excepting boots and shoes					
15	Liquors—					
	(1) Ale and beer	21	15	6		
	(2) Spirits of all kinds, including country spirit.	6				
	(3) Wine	26	20			
	(4) All other sorts, including toddy and fermented liquor, other than ale and beer.					
16	Metals—					
	(1) Brass, unwrought	51	23			
	(2) Do., wrought	120	120			
	(3) Copper, unwrought	10	15			
	(4) Do., wrought	2	14			
	(5) Iron and steel—					
	(a) Cast	61	112			
	(b) Unwrought					
	(c) Wrought	1,100	1,000			
	(d) Manufactures	200	270			
	(e) Others	154	224			
17	Oil—					
	(1) Kerosene	2,525	10,285		7,760	
	(2) Castor	11	21			
	(3) Coconut	125	106			
	(4) Mustard and rape	179	209			
	(5) Others	22	71			
18	Oilseeds—					
	(1) Castor	15	24			
	(2) Rape-seed					
	(3) Linseed	4,733	1,600			
	(4) Poppy					
	(5) Sesu and mustard	2,240	2,207			
	(6) Tila or linseed	13	13			
	(7) Others	61	20			
19	Opium	3	1			
20	Paper and postcard	574	515			
21	Provisions—					
	(1) Dried fruits and nuts	3				
	(2) Fish					
	(3) Others	1,124	1,425			

**SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 10, 1902. 1283**

No.	STAFFING.	1901.	1902.	Increase in 1902.	Decrease in 1902.	EXPLANATIONS OF FLUCTUATIONS BY TRAFFIC SUPERINTENDENT.
		Tons.	Tons.	Tons.	Tons.	
25	Railway Plant, &c., for the Public and Foreign Railways— (1) Locomotive engines and tenders and parts thereof. (2) Carriages and trucks and parts thereof. (3) Materials— (a) Steel rails and fish-plates (b) Sleepers and keys of steel and cast- iron. (c) Others	59 109 205 9.3	100 2,768 119	30 2,659 84	100 1,431 84	
26	Salt	5,718	7,027	1,309	1,309	
27	Saltpetre and other saline substances— (1) Saltpetre (2) Other saline substances	4 10	5 103	1 93	1 91	
28	Silk— (1) Raw— (a) Foreign (b) Indian (2) Piece-goods— (a) Foreign (b) Indian	50 100 100 100 100 100	50 100 100 100 100 100	50 100 100 100 100 100	50 100 100 100 100 100	
29	Spices— (1) Sateenuts (2) Cardamoms (3) Chillies (4) Ginger (5) Pepper (6) Others	228 20 218 104 27 126	218 20 218 104 27 126	57 27 27 27 27 27	57 27 27 27 27 27	
30	Stone and lime	1,238	5,466	4,228	4,228	
31	Sugar— (1) Refined or crystallised, including sugar- candy. (2) Unrefined— (a) Sugar (b) Gur, ragi, jaggery, molasses, and other saccharine produce.	554 501 707	750 608 1,667	196 107 960	196 107 960	
32	Tea— (1) Foreign (2) Indian	1,201 1,201	775 775	426 426	426 426	
33	Tobacco— (1) Unmanufactured (2) Manufactured— (a) Cigars (b) Other sorts	4,450 20 20 20	5,960 21 21 21	1,510 1 1 1	1,510 1 1 1	
34	Wood— (1) Timber, unwrought (2) Manufactured	711 157	1,048 306	337 149	337 149	
35	Wool— (1) Raw (2) Manufactured— (a) Carboys and rosi (b) Piece-goods, European (c) Piece-goods, Indian (d) Other sorts of manufactures	97 3 3 3 3	338 12 12 12 12	241 9 9 9 9	241 9 9 9 9	
36	All other articles of merchandise	2,534	4,514	1,980	1,980	
	Total	115,805	185,421	69,616	69,616	

**HARPRASAD DAB,**  
 CALCUTTA, the 1st September 1902.  
 for Examiner of Accounts, E. B. S. Railway.

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 23rd August 1902 on 1,918.49 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES.	
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.
Total traffic for the week (by per mile of railway)	265,226	Rs. 3,50,949 1 0	Mds. 41,73,057 20	Rs. 5,48,173 3 0	19,122 8 0	10,21,214 5 0	100,821	166,736
For previous 52 weeks of half-year.	2,582,096*	26,69,040 15 0†	3,00,02,550 50†	51,34,578 5 0†	1,22,709 0 0†	77,37,537 5 0	734,273‡	1,149,049‡
Total for 52 weeks.	2,847,322	27,24,989 1 0	3,41,74,407 10	56,82,751 5 0	1,41,831 0 0	97,58,751 5 0	835,094	1,315,785
COMPARISONS.								
Total for corresponding week of previous year.	265,116	Rs. 3,38,867 11 5	44,31,554 30	5,01,828 7 0	21,047 0 9	11,54,797 5 11	266,464	744,183
For mile of railway corresponding week of previous year.	138	182 11 10	23,111	2,605 4 3	11 7 2	600 7 3	1,344	3,724
Total for corresponding 52 weeks of previous year.	13,851,784	14,01,420 11 2	1,61,01,434 0	73,30,821 10 0	1,27,048 4 11	1,07,78,738 10 10	839,874	1,404,334

(a) The decrease is chiefly in coal.

\* Added No. of passengers 2,110 and deducted Rs. 3,982 on account of difference between the approximate and audited figures for the week ended 23rd Aug. Mds. 2,54,000 and Rs. 35,353 July 1902.

† Deducted

‡ Audited figures up to 19th July 1902.

1902.

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901.

Open mileage.	Period.	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total.	Per mile of Railway.	Train mileage.
		No. of Passengers.	Rs.	Mds.	Rs.	Rs.	Rs.	Rs.	No.
1,918.49	12 days of July	710,038	8,65,729	28,44,073	14,63,220	21,611	21,40,467	1,120	200,675
1,918.49	Week ended 19th July	441,134	5,78,481	17,12,891	8,07,440	16,895	11,07,615	605	128,531
1,918.49	" " 26th "	306,178	3,76,198	10,31,887	7,30,998	12,453	11,30,649	592	173,050
1,918.49	" " 3rd August	360,193	4,47,710	11,24,630	7,14,228	22,740	10,94,743	567	124,344
1,918.49	" " 10th "	241,594	2,45,707	6,99,290	7,18,000	22,546	10,89,293	568	172,036
1,918.49	" " 17th "	387,679	3,44,046	11,13,066	7,10,168	10,830	11,20,805	583	126,519
1,918.49	" " 24th "	212,349	2,55,919	6,12,007	6,06,173	19,122	10,21,214	534	120,677
	Totals up to date	2,486,674	27,24,989	3,41,74,407	56,82,751	1,41,831	97,58,751	605	1,404,334

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901—concluded.

		No. of Passengers.	Rs.	Mds.	Rs.	Rs.	Rs.	Rs.	No.
1,937.46	12 days of July	707,983	7,67,075	1,04,24,302	28,58,731	21,406	26,09,600	1,464	200,675
1,937.72	Week ended 19th July	396,810	5,78,481	17,12,891	8,07,440	16,895	11,07,615	605	128,531
1,938.44	" " 26th "	400,037	4,84,098	10,18,440	7,30,998	12,453	11,30,649	592	173,050
1,938.44	" " 3rd August	427,544	4,95,768	12,20,540	8,07,472	19,402	12,46,110	577	124,344
1,938.44	" " 10th "	418,433	4,03,800	8,99,290	8,11,256	22,546	10,89,293	568	172,036
1,938.44	" " 17th "	396,016	4,41,543	11,13,112	8,10,702	21,780	12,42,144	594	126,519
1,938.44	" " 24th "	208,115	2,55,919	6,12,007	6,06,173	19,122	11,20,797	534	120,677
	Totals up to date	2,451,750	26,91,431	3,40,91,434	73,30,781	1,37,068	1,07,78,738	749	1,404,334

\* Audited figures.

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 23rd August 1902 on 22.23 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES.	
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.
Total traffic for the week (by per mile of railway)	19,894	Rs. 4,107 9 6	Mds. 31,975 20	Rs. 4,51 7 2	6 3 0	4,754 7 2	1,028	142
For previous 52 weeks of half-year.	142,780*	31,074 14 6†	1,48,341 20†	2,528 12 9†	47 4 2‡	28,047 19 0	7,004	609
Total for 52 weeks.	162,674	35,182 14 0	1,60,316 20	2,538 3 0	53 7 2	32,801 1 0	7,732	751
COMPARISONS.								
Total for corresponding week of previous year.	15,400†	3,900 11 0	6,840 20	791 0 0	0 6 3	4,196 2 3	1,130	59
For mile of railway corresponding week of previous year.	700	176 7 0	311	35 1 0	0 4 7	190 12 7	52	2
Total for corresponding 52 weeks of previous year.	174,400	38,484 12 1	68,123 20	2,475 5 0	61 11 2	44,022 11 11	8,840	607

\* Added No. of passengers 1,282

† Deducted Mds. 1,075

‡ Added

§ Audited figures up to 19th July 1902.

and Rs. 11 11 on account of difference between the approximate and audited figures for the week ended 23rd Aug. Mds. 1,075 and Rs. 35,353 July 1902.



## TARKESUR BRANCH RAILWAY—concluded.

1902.

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901.

Open mileage.	Period.	Coaching Traffic.	Merchandise and Mineral Traffic.	Other earnings.	Total.	Per mile of railway.	Train mileage.
		No. of passengers.	Rs.	Mds.	Rs.	Rs.	No.
1902-23	15 days of July	50,661	10,018	75,407	1,575	11,806	2,458
1901-22	Week ended 19th July	51,057	9,999	14,987	408	7,513	1,250
1902-23	" " 29th "	51,087	4,723	14,850	371	5,608	1,149
1902-23	" " 3rd Aug.	51,087	4,007	14,850	383	5,657	1,154
1902-23	" " 10th "	51,087	4,717	17,000	300	5,455	1,138
1902-23	" " 18th "	51,087	4,794	16,380	304	5,190	1,138
1902-23	" " 23rd "	51,087	4,187	17,328	351	5,754	1,138
	Totals up to date	169,774	30,845	1,35,780	4,896	44,495	8,240

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901—concluded.

1901.

Open mileage.	Period.	Coaching Traffic.	Merchandise and Mineral Traffic.	Other earnings.	Total.	Per mile of railway.	Train mileage.
		No. of passengers.	Rs.	Mds.	Rs.	Rs.	No.
1901-22	15 days of July	41,358	9,310	50,302	765	10,714	2,458
1901-22	Week ended 19th July	41,358	4,345	5,910	287	6,994	1,198
1901-22	" " 27th "	41,358	4,412	7,204	414	7,777	1,253
1901-22	" " 3rd Aug.	41,358	4,459	6,850	354	5,728	1,138
1901-22	" " 10th "	41,358	4,007	6,850	314	5,120	1,138
1901-22	" " 17th "	41,358	4,294	7,207	370	5,716	1,138
1901-22	" " 24th "	41,358	3,901	6,811	351	5,190	1,138
	Totals up to date	174,502	30,465	68,114	2,478	48,048	8,240

\* Audited figures.

## DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 23rd August 1902, on 162.24 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of Passengers.	Coaching Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	10,428	Rs. A. P. 15,385 10 0	Mds. S. 78,179 30	Rs. A. P. 3,138 1 0	Rs. A. P. 48 0 0	Rs. A. P. 28,100 11 0	5,340	4,887	10,227
Per mile of railway for previous 51 weeks of half-year	151,894*	1,24,911 6 0†	10,34,835 10†	67,812 7 0†	211 8 0‡	1,32,431 11 0	55,225	21,582	76,807
Total for 7½ weeks	171,247	1,41,073 16 0	11,13,010 30	79,108 8 0	553 0 0	1,32,431 11 0	60,565	26,469	87,034
COMPARISON.									
Total for corresponding week of previous year.	30,900‡	15,385 8 9	61,850 0	15,032 4 0	23 6 0	25,945 3 3	7,773‡	8,230	16,003‡
Per mile of railway corresponding week of previous year.	...	RS 14 9	...	58 18 6	0 5 4	158 14 10	...	...	...
Total for corresponding 7½ weeks of previous year.	170,998	1,42,060 0 1	6,67,014 30	68,041 7 7	340 1 0	1,30,855 12 3	60,174	27,940	88,114

\* Deducted No. of passengers 289 and Rs. 407 and „ 5,738 † On account of difference between the approximate and audited figures for the week ended 19th July 1902.  
 ‡ Deducted „ 15.  
 § Audited figures up to 19th July 1902.

1902.

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901.

Open mileage.	Period.	Coaching Traffic.	Merchandise and Mineral Traffic.	Other earnings.	Total.	Per mile of railway.	Train mileage.
		Number of passengers.	Rs.	Mds.	Rs.	Rs.	No.
1902-24	15 days of July	50,661	10,018	75,407	1,575	11,806	2,458
1902-24	Week ended 19th "	51,057	9,999	14,987	408	7,513	1,250
1902-24	" " 29th "	51,087	4,723	14,850	371	5,608	1,149
1902-24	" " 3rd Aug.	51,087	4,007	14,850	383	5,657	1,154
1902-24	" " 10th "	51,087	4,717	17,000	300	5,455	1,138
1902-24	" " 18th "	51,087	4,794	16,380	304	5,190	1,138
1902-24	" " 23rd "	51,087	4,187	17,328	351	5,754	1,138
	Totals up to date	171,247	1,41,073	11,13,010	79,108	1,32,431	8,240

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901—concluded.

1901.

Open mileage.	Period.	Coaching Traffic.	Merchandise and Mineral Traffic.	Other earnings.	Total.	Per mile of railway.	Train mileage.
		Number of passengers.	Rs.	Mds.	Rs.	Rs.	No.
1901-23	15 days of July	41,358	9,310	50,302	765	10,714	2,458
1901-23	Week ended 19th "	41,358	4,345	5,910	287	6,994	1,198
1901-23	" " 27th "	41,358	4,412	7,204	414	7,777	1,253
1901-23	" " 3rd Aug.	41,358	4,459	6,850	354	5,728	1,138
1901-23	" " 10th "	41,358	4,007	6,850	314	5,120	1,138
1901-23	" " 17th "	41,358	4,294	7,207	370	5,716	1,138
1901-23	" " 24th "	41,358	3,901	6,811	351	5,190	1,138
	Totals up to date	174,502	30,465	68,114	2,478	48,048	8,240

\* Audited figures.

## SOUTH BEHAR RAILWAY.

Approximate Return of Traffic for week ended 23rd August 1902, on 74.76 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	11,354	4,740 0 0	29,475 10	1,028 4 0	28 0 0	7,206 4 0	1,070	900	1,970
Or per mile of railway ...	77.14	63.17 0 0	2,51,008 207	14,087 21 0 7	6 5 5	97 14 1	15,115	4,884	19,999
For previous 7 weeks of half-year ...	60,700	47,036 1 0	2,41,275 50	90,080 15 0	180 0 0	65,077 0 0	13,000	6,887	19,887
COMPARISON.									
Total for corresponding week of previous year ...	11,596	6,311 13 7	35,000 10	2,006 8 0	12 8 0	8,137 13 7	2,119	1,183	3,302
Per mile of railway corresponding week of previous year ...	...	83 13 11	...	98 14 5	0 4 0	116 0 4	...	...	...
Total for corresponding 7 weeks of previous year ...	152,252	60,430 10 8	3,01,143 30	24,654 8 0	138 11 0	94,373 11 0	18,100	9,910	28,010

\* Added No. of passengers 651 and deducted Rs. 50 }  
 Deducted minutes 5,420 and added .. 304 } On account of difference between the approximate and audited figures for the week ended 10th July 1902.  
 Do. .. 10 }  
 † Audited figures up to 10th July 1902.

1902.

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901.

Open mileage.	Period.	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total.	Per mile of railway.	Train mileage.	
		Number of passengers.	Rs.	Mds.	Rs.	Rs.	Rs.	Rs.	No.	Rate.
										Rs. A. P.
1902	15 days of July ..	22,554	13,210	90,167	4,375	31	16,525	214	4,901	3 4 0
1901	Week ended 29th ..	12,811	6,084	53,422	2,125	8	8,726	111	2,678	3 4 1
1902	" " 29th ..	11,165	6,554	46,118	2,251	21	8,790	112	2,701	3 3 0
1901	" " 29th ..	10,144	6,553	53,015	2,185	25	8,763	107	2,614	3 10 7
1902	" " 29th ..	10,234	6,776	51,645	1,844	20	8,640	97	2,635	3 11 2
1901	" " 29th ..	9,745	6,340	48,105	2,048	27	8,420	93	2,823	3 17 0
1902	" " 29th ..	10,135	6,700	52,173	1,923	20	8,740	98	2,418	3 2 5
	Totals up to date ..	60,580	47,036	2,81,276	10,001	180	65,077	107	21,487	3 0 7

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901—concluded.

1901.

Open mileage.	Period.	No. of passengers.	Rs.	Mds.	Rs.	Rs.	Rs.	Rs.	No.	Rate.
										Rs. A. P.
1902	15 days of July ..	22,554	13,210	90,167	4,375	31	16,525	214	4,901	3 4 0
1901	Week ended 29th ..	12,811	6,084	53,422	2,125	8	8,726	111	2,678	3 4 1
1902	" " 29th ..	11,165	6,554	46,118	2,251	21	8,790	112	2,701	3 3 0
1901	" " 29th ..	10,144	6,553	53,015	2,185	25	8,763	107	2,614	3 10 7
1902	" " 29th ..	10,234	6,776	51,645	1,844	20	8,640	97	2,635	3 11 2
1901	" " 29th ..	9,745	6,340	48,105	2,048	27	8,420	93	2,823	3 17 0
1902	" " 29th ..	10,135	6,700	52,173	1,923	20	8,740	98	2,418	3 2 5
	Totals up to date ..	152,252	60,431	3,01,143	24,654	180	94,173	152	30,000	3 8 10

\* Audited figures.

## BENGAL CENTRAL RAILWAY COMPANY, LIMITED.

Approximate Return of Traffic and Mileage for the week ended 23rd August 1902 on 139 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	21,023	10,754 0 0	90,075 6	10,420 6 4	51 0 0	22,725 0 0	3,509	8,805	12,314
Or per mile of railway ...	213	84 0 0	804 0	75 0 0	...	160 0 0	...	...	...
For previous 7 weeks of half-year ...	239,951	10,003 0 0	3,30,759 0	36,643 0 0	701 0 0	1,34,002 0 0	23,010	10,330	33,340
Total for 8 weeks ...	260,974	1,09,052 0 0	4,41,744 0	47,073 0 0	802 0 0	1,68,827 0 0	26,519	19,135	45,654
COMPARISON.									
Total for corresponding week of previous year ...	20,162	12,800 6 0	1,02,807 8	17,809 6 0	260 0 0	30,825 0 0	2,800	8,306	11,106
Per mile of railway corresponding week of previous year ...	232	92 0 0	1,027 0	128 0 0	2 0 0	215 0 0	...	...	...
Total for corresponding date of previous year ...	234,400	1,04,739 0 0	7,08,153 0	83,830 0 0	27,169 6 0	2,14,878 0 0	34,961	32,197	67,158

\* Coaching traffic calculated on 139 miles only.

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., K.-D., DACCA, AND ASSAM-BEHAR SECTIONS.)

Approximate Return of Traffic and Mileage for the week ended 23rd August 1902 on 861 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	207,400	Rs. A. P. 59,790 0 0	Mds. 16,81,330 0	Rs. A. P. 8,50,150 0 0	Rs. A. P. 11,190 0 0	Rs. A. P. 5,51,140 0 0	37,808	61,544	99,352
Or per mile of railway	241	104 0 0	1,235 0	501 0 0	2 0 0	285 0 0	...	...	...
For previous 7 weeks of half-year	1,594,000	6,95,340 0 0	95,50,000 0	10,08,280 0 0	82,740 0 0	17,87,000 0 0	264,502	940,174	607,336
Total for 8 weeks	1,801,400	7,55,130 0 0	1,12,31,330 0	10,88,540 0 0	93,930 0 0	18,38,100 0 0	302,310	1,000,718	670,628
COMPARISON.									
Total for corresponding week of previous year	161,158	51,377 0 0	10,61,825 0	8,15,300 0 0	11,500 0 0	3,27,425 0 0	36,627	46,833	83,460
Per mile of railway corresponding week of previous year	180	65 0 0	1,243 0	870 0 0	1 0 0	372 0 0	...	...	...
Total to corresponding date of previous year	1,702,158	7,22,828 0 0	1,09,40,980 0	10,22,375 0 0	1,11,500 0 0	20,74,506 0 0	296,323	1,000,731	596,354

\* Excluding ferry earnings.

## BEAHMAPUTRA-SULTANPUR RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 23rd August 1902 on 59.19 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	6,390	Rs. A. P. 1,830 0 0	Mds. 46,100 0	Rs. A. P. 4,570 0 0	Rs. A. P. 90 0 0	Rs. A. P. 4,760 0 0	1,078	1,064	2,142
Or per mile of railway	100	31 0 0	778 0	77 0 0	1 0 0	80 0 0	...	...	...
For previous 7 weeks of half-year	44,130	12,680 0 0	1,72,570 0	16,060 0 0	340 0 0	16,860 0 0	7,446	7,330	14,776
Total for 8 weeks	50,520	14,510 0 0	1,87,670 0	16,630 0 0	430 0 0	17,490 0 0	8,524	8,394	16,918
COMPARISON.									
Total for corresponding week of previous year	6,696	1,794 0 0	38,654 0	4,360 0 0	18 0 0	2,282 0 0	787	1,013	1,800
Per mile of railway corresponding week of previous year	112	30 0 0	650 0	73 0 0	...	39 0 0	...	...	...
Total to corresponding date of previous year	46,443	13,433 0 0	1,59,136 0	15,740 0 0	100 0 0	15,843 0 0	6,623	10,773	17,396

## MYMENSINGH-JAGANNATHGANJ RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 23rd August 1902 on 63.37 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	8,510	Rs. A. P. 2,130 0 0	Mds. 35,480 0	Rs. A. P. 1,210 0 0	Rs. A. P. 30 0 0	Rs. A. P. 2,170 0 0	1,104	1,080	2,184
Or per mile of railway	130	34 0 0	554 0	19 0 0	1 0 0	34 0 0	...	...	...
For previous 7 weeks of half-year	53,180	14,450 0 0	1,39,870 0	4,710 0 0	170 0 0	15,330 0 0	8,069	8,979	17,048
Total for 8 weeks	61,690	16,580 0 0	1,55,350 0	5,920 0 0	200 0 0	16,780 0 0	9,173	9,959	19,132
COMPARISON.									
Total for corresponding week of previous year	7,507	1,918 0 0	18,127 0	806 0 0	30 0 0	2,784 0 0	1,080	748	1,828
Per mile of railway corresponding week of previous year	119	30 0 0	284 0	13 0 0	1 0 0	44 0 0	...	...	...
Total to corresponding date of previous year	60,340	15,577 0 0	1,55,425 0	5,221 0 0	308 0 0	16,108 0 0	8,760	8,297	17,057

*Approximate Return of Traffic and Mileage for the week ended 23rd August 1902 on 66 miles open.*

*Approximate Return of Traffic and Mileage for the week ended 23rd August 1902 on 3578 miles open.*

Uphill: 1,800.

*Approximate Return of Traffic for the week ending 23rd August 1902 on a 1,261 miles open.*

(c) Includes 7,300 miles of ballast trains run on open line.

## BEGOWLIE-RAKSAIL BRANCH RAILWAY.

(WORKED BY THE B. &amp; N.-W. RAILWAY.)

Approximate Return of Traffic for the week ending 23rd August 1902 on 18 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Passengers carried.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
	No.	Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 18 miles open ...	8,002	1,526	50,835	1,477	43	2,046	2,406	640	3,174
Or per mile of railway ...	444	84	2,824	82	2	113	134	35	174
For previous 52 weeks of half-year ...	40,814	7,628	1,324,547	1,300	214	8,946	10,774	2,824	13,598
Total for 52 weeks ...	40,814	7,628	1,324,547	1,300	214	8,946	10,774	2,824	13,598
COMPARISON.									
Total for corresponding week of previous year on 18 miles open ...	2,070	308	8,479	227	7	512	333	121	504
Per mile of railway corresponding week of previous year ...	115	17	471	13	0	28	40	15	28
Total to corresponding date of previous year ...	18,390	2,657	57,240	1,790	97	4,549	5,324	573	5,900

NOTE.—The line was closed for all descriptions of traffic from 10th August 1902 owing to floods.

## ASSAM-BENGAL RAILWAY.

Approximate Return of Traffic for the week ended 23rd August 1902 on 558 miles open for all descriptions of traffic, and additional 31 miles for goods and parcels traffic only.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
	No.	Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	20,364	16,487 0 0	1,50,546 0	14,075 0 0	222 0 0	10,774 0 0	6,074	4,503	10,577
Or per mile of railway ...	36	29	2,700	25	4	19	11	8	19
For previous 52 weeks of half-year ...	1,041,705	1,18,498 0 0	10,96,814 0	1,02,431 0 0	9,248 0 0	2,21,171 0 0	44,014	34,521	78,535
Total for 52 weeks ...	1,041,705	1,18,498 0 0	10,96,814 0	1,02,431 0 0	9,248 0 0	2,21,171 0 0	44,014	34,521	78,535
COMPARISON.									
Total for corresponding week of previous year ...	23,733	13,514 0 0	24,180 0	15,700 0 0	108 0 0	2,1,977 0 0	7,042	4,983	12,025
Per mile of railway corresponding week of previous year ...	42	24	43	27	2	39	12	9	21
Total to corresponding date of previous year ...	907,480	1,24,454 0 0	8,71,918 0	1,30,630 0 0	9,027 0 0	2,55,040 0 0	50,346	47,333	97,679

## FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Assam-Bengal Railway.

RECEIPTS FOR WEEK ENDED 23rd AUGUST 1902.			RECEIPTS FOR WEEK ENDED 23rd AUGUST 1901.			TOTAL RECEIPTS FROM 1st APRIL 1902 TO 23rd AUGUST 1902.			TOTAL RECEIPTS FROM 1st APRIL 1901 TO 23rd AUGUST 1901.			Total increase in 1902.	Total decrease in 1902.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.			Rs.		Rs.	Rs.
558	20,720	37	578	20,377	35	563	7,60,938	13	578	7,65,848	13	—	75,516

## SEGOWLIE-BAKSAUL BRANCH RAILWAY.

(WORKED BY THE B. &amp; N.-W. RAILWAY.)

Approximate Return of Traffic for the week ending 30th August 1902 on 18 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIL-MILES RUN.		
	Passengers carried.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 18 miles open	1,014	Rs. 207	9,066	Rs. 298	Rs. 10 0 55	Rs. 485 10 55	340	128	468
Or per mile of railway	140 33	21 50	568 33	16 50		67 24			
For previous 12 weeks of half-year	10,884	1,324	45,541	1,320	51	2,080	2,495	588	3,083
Total for 21 weeks	11,778	1,531	54,607	1,518	61	2,166	2,835	716	3,551
COMPARISON.									
Total for corresponding week of previous year on 18 miles open	2,703	308	2,303	190	9	600	423	88	511
Or per mile of railway	155 50	21 73	651 28	11 08	0 27	33 33			
Total to corresponding date of previous year	21,105	2,059	86,562	1,810	90	5,106	3,745	784	4,529

NOTE.—The line re-opened for all descriptions of traffic from 24th August 1901.

## SEGOWLIE-BAKSAUL BRANCH RAILWAY.

(WORKED BY THE B. &amp; N.-W. RAILWAY.)

Audited Return of Traffic for the last 9 days of June 1902 on 18 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIL-MILES RUN.		
	Passengers carried.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 18 miles open	3,072	Rs. 4 2 5	21,118	Rs. 1 11	Rs. 4 5 0	Rs. 10 10 4	643	229	872
Or per mile of railway	170 67	30 4 4	1,172 32	24 5 8	0 3 11	56 15 11			
For previous 21 weeks of half-year	61,828	10,830 10 5	3,21,504	8,115 0 7	861 8 0	12,806 0 0	9,131	2,390	11,521
Total for the 21 weeks	64,900	11,177 12 10	3,42,622	8,330 8 6	906 14 0	13,196 3 4	9,774	2,619	12,393
COMPARISON.									
Total for corresponding week of previous year on 18 miles open	2,417	430 8 5	14,025	375 10 8	— 0 0	705 8 11	470	103	573
Or per mile of railway	134 73	23 14 3	812 50	15 5 1	— 0 0	39 1 1			
Total to corresponding date of previous year	62,120	9,895 12 11	2,88,597	7,014 2 7	783 14 0	10,812 12 8	8,508	2,175	10,683

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

		Rs.	A.	P.	Rs.	A.	P.
Approximate earnings for the week ending 30th Aug. 1902	Coaching	5,046	0	0	19,812	0	0
	Goods	18,234	0	0			
	Other earnings	461	0	0			
Audited earnings for the corresponding period of 1901	Coaching	4,769	0	0	16,483	0	0
	Goods	10,815	0	0			
	Other earnings	409	0	0			
	Increase					4,329	0 0
Receipts per mile for the week ending 30th Aug. 1902						388	7 0
Ditto for the corresponding period of 1901						308	9 5
	Increase					80	14 1
Receipts from 1st July to 30th Aug. 1902						1,14,975	0 0
Ditto for the corresponding period of 1901						1,23,185	0 0
	Decrease					7,210	0 0



SUPPLEMENT TO  
**The Calcutta Gazette.**

WEDNESDAY, SEPTEMBER 24, 1902.

OFFICIAL PAPERS.

[Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of five rupees per annum if delivered in Calcutta, or seven rupees and eight annas if sent by post.]

CONTENTS.

	Page		Page
EXTRACT from the Annual Report on the Government Cinchona Plantation and Factory in Bengal for the year 1901-1902	1353	Circular and Eastern Canal for the week ending Saturday the 20th September 1902	1374
Weather and Crop Report for the week ending the 22nd September 1902	1363	Results of the Meteorological Observations taken at the Alipore Observatory from 16th to 20th September 1902	1375
Price-current (retail and wholesale) of food-grains and salt in the head-quarters station houses of the districts of Bengal on the 18th September 1902	1367	Eastern Bengal State Railway during the month of June 1902	1376
		Weekly Return of Traffic Receipts on Indian Railways	1378

ANNUAL REPORT ON THE GOVERNMENT CINCHONA PLANTATION AND FACTORY IN BENGAL FOR THE YEAR 1901-1902.

*The 12th September 1902.*—The following extracts from the Annual Report on the Government Cinchona Plantation and Factory in Bengal for the year 1901-1902 are published for general information.

E. W. COLLIN,  
*Offg. Secy. to the Govt. of Bengal.*

No. 149C., dated Royal Botanic Garden, Sibpur, the 14th July 1902.

From—MAJOR D. PRAIN, M.B., I.M.S., Superintendent, Royal Botanic Garden, Calcutta, and of Cinchona Cultivation in Bengal, and Government Quinologist,

To—The Secretary to the Government of Bengal, Financial Department.

I HAVE the honour to submit the report of the Cinchona Plantation and Factory for the official year 1901-1902.

*Fortieth Annual Report of the Government Cinchona Plantation in Sikkim, being that for the financial year 1901-1902, and also the Report of the Factory for the same year, by MAJOR D. PRAIN, I.M.S., Superintendent of Cinchona Cultivation in Bengal, and Government Quinologist.*

1. *Weather and General.*—The rainfall during the year was below normal; 92·69 inches, as against an average of 123·01 for the preceding 27 years. As compared with 1900-1901 the number of rainy days was greater, 153 as against

137; the total fall was, however, considerably less, 92.69 inches for 1901-1902, as against 126.23 inches for 1900-1901. No heavy downpours occurred and no damage has to be recorded. At Munsong, the new extension in the Dumsong Forest, 88.42 inches of rain were registered.

2. *Plantation and Crop.*—The number of plants put out during the year was 485,530. These included 397,010 *Ledgeriana*, 26,078 *Succirubra*, 55,007 *Hybrid No. I*, and 7,435 *Hybrid No. II*. This latter, which appears for the first time in this report, has been raised by crossing *Ledgeriana* with *Succirubra*; the *Hybrid* of former reports, to be designated in future *Hybrid No. I*, is a cross between *Succirubra* and *Officinalis*. It is hoped that the new hybrid may possess enough of the richness of *Ledgeriana* with enough of the vigour of *Succirubra*, to admit of its extensive cultivation on the Rungbee part of the plantation where the conditions are most unfavourable for *Ledgeriana* itself.

The area planted at the head-quarters plantation (Mungpoo and Sittong) was 88.28 acres; here 121,828 *Ledgeriana* plants, all the *Succirubra* and *Hybrid No. I* plants and 3,085 *Hybrid No. II* plants were put out. At Munsong 103.58 acres were planted with 275,182 *Ledgeriana* and 4,350 *Hybrid No. II* plants.

The nursery stock of seedlings on 31st March 1902 was 21,500. As compared with 31st March 1901 there were in the lines 2,000 plants more of *Hybrid No. I* and 3,000 more of *Hybrid No. II*, but 11,500 fewer *Succirubra* and 32,000 fewer *Ledgeriana*. There were thus 38,500 fewer plants to be put out after 1st April 1902 than there were at the same date the preceding year, indicating an earlier planting season in 1902 than in 1901.

The total number of living trees of all kinds in the permanent plantations on 31st March 1902 was 2,763,286. Of these, 1,928,422 were at Mungpoo (including Rungbee and Labdah) and 246,648 at Sittong. At Munsong, in the Dumsong forest, there were 588,216. The trees included 2,000,092 *Ledgeriana*, 234,446 *Succirubra*, 2,130 *Officinalis*, 519,183 *Hybrid No. I* and 7,435 *Hybrid No. II*. The increase as compared with 31st March 1901 was 379,758.

Planting at Munsong this year has been less successful than could be wished. A failing water-supply at the nursery-lines compelled the Deputy Superintendent to plant early as the least of two evils; the result has been a very high proportion of casualties. Arrangements have already been made to meet the case and to replant where replanting is necessary.

During the year 600 maunds of bonemeal, at the rate of 10 maunds per acre, were applied to four-year-old cinchonas. This manure acts slowly, and as yet little difference is apparent in the condition of the trees so treated.

The crop taken from the plantation during the year has been 203,405 lbs. of dry bark. From Mungpoo the quantity taken was 165,808 lbs.; from Sittong 37,597 lbs. The crop has been composed of 120,294 lbs. *Ledgeriana*, 3,306 lbs. *Succirubra* and 79,715 *Hybrid No. I*. From the Mungpoo Division the bark has been taken from outlying and sparse patches of *Ledgeriana* and *Hybrid No. I*, which have been uprooted in accordance with the policy pursued during recent years of concentrating the area under cinchona so as to admit of its higher cultivation. The Sittong division has never given satisfactory results with *Ledgeriana*, and the last trees of that kind have now been harvested from the division. The whole of the bark thus harvested has been made over as usual to the Quinologist.

3. *Factory and outturn.*—Work in the factory has gone on throughout the year without accident or delay. Very considerable improvement has been effected in the arrangement and method of working. The improvements have necessitated various renewals and a number of additions to the factory plant.

The raw material worked up during the year included 390,043½ lbs. *Ledgeriana*, *Hybrid No. I* and *Officinalis* bark which provided 10,010 lbs. 12 oz. of sulphate of quinine, the average yield being 2.56 per cent. The residual (amorphous) alkaloids that are left over in the process, accounted for during the year, amount to 5,867 lbs. In addition to this quantity, 99,800 lbs. of *Succirubra* and *Hybrid* barks to which 4,980 lbs. of residual alkaloids were added, yielded 3,424 lbs. of cinchona febrifuge. The total outturn of manufactured products for the year has thus been 13,434 lbs. 12 oz., an increase as compared with the previous year of 3,599 lbs. 12 oz. This increased



quantity included 2,663 lbs. 12 oz. of sulphate of quinine and 936 lbs. of cinchona febrifuge.

4. *General charges.*—The charges debitable against the department as a whole have amounted to Rs. 25,632-7-11, as against Rs. 28,769-10-6 for the preceding year. These charges include pay of clerical and menial establishment, Rs. 4,935; postal and telegraph charges, Rs. 521-12; advertising manufactured articles, Rs. 1,052; and taxes (road and public works cesses), Rs. 1,475. They include, besides, the expenditure incurred in opening up new and extending existing plantations (as apart from the upkeep of permanent plantations and the harvesting of bark) and expenditure in additions to the factory (as apart from cost of working and of manufacturing quinine and febrifuge). The charges for extensions amounted to Rs. 9,895-7-8, being Rs. 6,629-1-11 for planting 103-58 acres of new plantation at Munsong and Rs. 3,266-5-9 for planting 88-28 acres at head-quarters. The corresponding general outlay in connection with the factory amounted to Rs. 7,753-4-3.

5. *Plantation charges.*—The charges directly debitable against the plantation for upkeep and for the harvesting of bark have been Rs. 55,602-8-10, as against Rs. 50,428-10-6 for 1900-1901. Against this outlay has to be placed the harvest, 203,405 lbs. of dry bark collected during the year which was thus collected at a cost of Rs. 0-4-4-5 per lb., at which rate it passes over to the Quinologist's Department.

6. *Factory charges.*—The expenditure incurred in connection with the Factory was Rs. 79,404-2. Of this sum, Rs. 38,000 represents the purchase-money, and Rs. 1,012-10-7 the cost of carriage to the factory, of 120,290 lbs. of bark acquired from private growers; the actual working expenses of the factory for the year were therefore Rs. 40,391-7-5, being Rs. 39,131-5-5 incurred in the manufacture of sulphate of quinine and Rs. 5,260-2 for the manufacture of cinchona febrifuge.

In order to produce 10,010 lbs. 12 oz. of sulphate of quinine, 259,371 lbs. of *Lodgeriana* bark, 72,551 lbs. *Hybrid No. 1*, and 26,728 lbs. *Officinatus* from the stock held on 1st April 1901 were used. The value of this bark was Rs. 29,887-8. In addition 31,393½ lbs. of *Officinatus* bark, purchased during the year for Rs. 11,276-11-9, were employed. The total value of the bark used was thus Rs. 41,164-3-6; this sum, added to the manufacturing charges, gives a total of Rs. 76,295-9-2, or Rs. 7-9-11-3 per lb. Of the residual (amorphous) alkaloid left as a bye-product in the manufacture of quinine, 4,980 lbs. treated along with 99,600 lbs. of *Succirubra* and *Hybrid No. 1* bark, provided 3,424 lbs. of cinchona febrifuge. The value of the bark used was Rs. 8,300; of the residual alkaloids, Rs. 4,720-10; the working expenses amounted to Rs. 5,260-2. The total cost of making 3,424 lbs. of cinchona febrifuge was thus Rs. 18,280-12, or Rs. 5-5-5 per lb.

7. *Issues of manufactured articles.*—The issues of sulphate of quinine for the year amounted to 9,793 lbs. 3 oz., a decrease of 1,213 lbs. 13 oz. as compared with 1900-1901. This decrease is accounted for by the fact that the Jail Department required 1,500 lbs. less for conversion into pice-packets. The demand by Government officers for dispensaries, &c., on the other hand, increased by 391 lbs. 9 oz.

The issues of cinchona febrifuge for the year amounted to 3,670 lbs. 4 oz., a decrease as compared with the previous year of 135 lbs. 13 oz. This decrease is explained by the fluctuating character of the demands on the part of medical depôts. The Mian Mir Depôt took 100 lbs. more than in 1900-1901, but that at Calcutta required 650 lbs. less. This deficit was to some extent counterbalanced by an indent for 300 lbs. cinchona febrifuge by the Principal Veterinary Officer, South Africa. Judged by the only certain test,—the demand by the public generally,—the belief in the reliability of febrifuge as a remedy for malaria remains unchanged. These sales to the public were 113 lbs. 8 oz. in excess of those for 1900-1901.

8. *Receipts.*—The receipts for the year have amounted to Rs. 1,91,922-5-2 as compared with Rs. 2,27,087-10-3 for the preceding year. Cash receipts have amounted to Rs. 78,441-2-6, and include, besides the receipts for manufactured articles (quinine Rs. 48,521-5-6 and cinchona febrifuge Rs. 28,393-8), Rs. 1,206-3 as receipts for crude products (bark Rs. 168-3, seed Rs. 40, residual

alkaloids Rs. 1,088), and Rs. 230-2 as receipts for miscellaneous articles (empty soda-drums, gunny-bags, &c.) The book-credits for the year amounted to Rs. 1,13,481-2-8 and have included Rs. 27,550 for issues to the Bengal Jail Department, and Rs. 1,609-8 for issues to the Punjab in connection with the pico-packet systems in those provinces. The other book-credits were Rs. 81,316-10-8 for issues to medical depôts; Rs. 3,000 for issues to the Principal Veterinary Surgeon, South Africa, and Rs. 5 to the Inspector-General of Civil Hospitals, Bengal. The outstandings, representing cash-issues made within the last few days of the financial year, the transactions regarding which were not completed on 31st March, amounted to Rs. 4,401-10.

9. *Stock account.*—The manufactured articles in stock on 31st March 1902 consisted of 2,957 lbs. 15 oz. of sulphate of quinine and 2,534 lbs. 12 oz. of cinchona febrifuge; their respective values were, quinine Rs. 22,823-13-11 and febrifuge Rs. 13,533, these sums representing the cost of production of each of the articles. Raw material and unmanufactured products included 115 lbs. of residual (amorphous) alkaloids in stock at Calcutta, valued at Rs. 109-0-2 and 1,397,241 lbs. 8 oz. of cinchona bark, valued at Rs. 1,55,904-0-7. The value of stores in stock was Rs. 4,886-6-3, consisting of oils Rs. 2,850-8-3, chemicals Rs. 1,073, and sundries (plaster of Paris, charcoal for purification and spare wheel for turbine) Rs. 362-13.

10. \* \* \* \* \* *Balance sheet.*—The balance on the working of the Department was Rs. 59,806-1-8, but against this has to be placed the expenditure incurred in writing down the difference between the cost of production and the actual market-value of the bark harvested from the plantation. This amounts to Rs. 18,500-1-10, so that the actual surplus for the year is Rs. 41,305-15-10. This surplus, it has to be remarked, must not be looked upon as wholly profit. The quantities of the various articles in stock were not materially different at the opening and at the close of the year; the enhancement in value noted above is thus due to the fact that a somewhat different method of estimating the value of cinchona bark in store has been prescribed for observance. If this factor in the surplus be disregarded, the difference between income and expenditure, Rs. 31,283-2-5, with the depreciation charge in the bark-harvest, Rs. 14,500-1-10, deducted therefrom, thus leaving an actual surplus of Rs. 12,783-0-7, more approximately represents the profit of the Department for the year.

11. *Sale of quinine at post-offices.*—The quantity issued to the Jail Department during 1901-1902 was 1,900 lbs., a falling off as compared with the preceding year of 1,500 lbs. No explanation of this remarkably diminished demand has been received from the Departments concerned.

WEATHER AND CROP REPORT.

For the week ending the 22nd September 1902.

**Burdwan.**—Rainfall at Sedar 2·02, Kalna 0·79, Katwa 1·60, Raniganj 2·32. Weather fine and hot. Transplantation of *aman* finished. Weeding of *aman* and harvesting of *aus* continues. More rain wanted. Fodder and water sufficient. No cattle-disease. Common rice sells at 11 seers per rupee.

**Birbhum.**—Rainfall at Sedar 1·13, Rampur Hat 1·05. Weather unsettled. Standing paddy flourishes and doing well. Fodder sufficient. Common rice sells at 12½ seers per rupee.

**Bankura.**—Rainfall at Sedar 1·15. Paddy and sugarcane doing well, but more rain wanted. Fodder and water sufficient. Common rice sells at 13 seers per rupee.

**Midnapore.**—Rainfall at Sedar 0·43, Contai nil, Tamluk 1·54, Ghatal 0·59. Weather hot and cloudy. Harvesting of *aus* going on. Agricultural prospects favourable. Fodder and water sufficient. Cattle-disease reported from Binpur thana. Common rice sells as follows:—

	Srs.	ch.	
Sedar	...	12 8	} per rupee.
Contai	...	13 0	
Tamluk	...	11 0	
Ghatal	...	12 0	

**Hoochly.**—Rainfall at Sedar nil, Serampore 0·36, Arambagh 1·90. Weeding of *aman* and steeping of jute going on. Prospect of standing crops good. Weather seasonable. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sedar	...	10 0	} per rupee.
Serampore	...	10 5	
Arambagh	...	11 5	

**Howrah.**—Rainfall at Sedar 0·02, Ulubaria 0·45. Fall general and recorded two days in the week. More rain wanted for the high lands. Harvesting of the *aus* finished. Its threshing is going on. Cutting and steeping of jute still going on. Sugarcane doing well. Transplantation of the *aman* nearly finished. Fodder and water-supply sufficient. No cattle-disease. Common rice sells on an average at 11 seers per rupee everywhere within the district.

**24 Parganas.**—Rainfall at Sedar 1·02, Barasat 0·48, Basirhat 1·12, Diamond Harbour 0·10. Little rain. Weather hot and sunny. Rain urgently wanted in Diamond Harbour. State and prospect of standing crops good. *Aus* and jute still being harvested. Transplantation of *aman* finished. Land being prepared for the *rabi* crops in Basirhat. Condition of cattle good. Supply of fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sedar	...	11 0	} per rupee.
Basirhat	...	10 0	
Diamond Harbour	...	10 8	

**Nadia.**—Rainfall at Sedar 1·08, Kushtia 2·20, Chuadanga 1·43, Meherpur 1·86, Ranaghat 1·88. Weather hot. Harvesting of jute almost finished. Prospects of standing crops good. No cattle-disease reported. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sedar	...	12 0	} per rupee.
Kushtia	...	11 0	
Chuadanga	...	10 0	
Meherpur	...	13 5	
Ranaghat	...	12 0	

**Murshidabad.**—Rainfall at Sedar 2·69, Kandi 2·80, Jangipur 2·00, Lalbagh 1·22. Weather seasonable. Sowing of *rabi* crop commences. Harvesting of *aus* and transplantation of *aman* over. Jute being cut and steeped in Jangipur. Prospect of sugarcane good. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sedar	...	11 8	} per rupee.
Kandi	...	12 8	
Jangipur	...	12 0	
Lalbagh	...	11 0	

**Jessore.**—Rainfall at Sedar 0·05, Jhenida 2·16, Magura 1·34, Narail 0·03, Dangaon 1·02. Weather seasonable. Prospects of crops good. Harvesting of *aus* completed. More rain wanted. Fodder and water sufficient. Cattle-disease reported from Balikha outpost

in Magura subdivision and from Bagbarpara thana in Sadar. Common rice sells as follows:—

				Srs. ch.	
Sadar	...	...	...	12 0	} per rupee
Jhenada	...	...	...	12 0	
Magura	...	...	...	11 0	
Narail	...	...	...	11 8	
Bangaon	...	...	...	12 0	

**Khulna.**—Rainfall at Sadar 2·67, Bagorhat 0·83, Satkhira 0·18. Weather seasonable. Transplantation of *aman* nearly completed. Fodder and water sufficient. A few cases of cattle-disease reported from thana Khulna. Common rice sells as follows:—

				Srs. ch.	
Sadar	...	...	...	11 8	} per rupee.
Bagorhat	...	...	...	11 11	
Satkhira	...	...	...	10 8	

**Rajshahi.**—Rainfall at Sadar 6·06, Nator 2·19, Naugaon 1·82. Weather hot and rains ceasing. Prospects of standing crop very good. Harvesting of jute and transplantation of *aman* nearly finished. No cattle-disease reported. Common rice selling at 12 seers per rupee.

**Dinajpur.**—Rainfall at Sadar 9·43. Fall in the district general, varying from 1·61 to 8·57. Weather gloomy. Standing crops good. Steeping of jute continues. Cattle-disease reported from two thanas. Fodder and water plentiful. Rice selling at 13 seers at Thakurgaon and 12 seers at Sadar per rupee.

**Jaipurguri.**—Rainfall at Sadar 14·27, Alipore Duars 10·11. Fall general and weather rainy. *Haimanti* paddy doing well. Prospect favourable. Harvesting of *bhadoi* paddy nearly finished. Steeping of jute going on. Lands are being cultivated for tobacco. Common rice sells at 11½ seers a rupee. Fodder and water sufficient.

**Darjeeling.**—Rainfall at Sadar 8·23, Kurseong 13·65, Siliguri 7·81. Weather seasonable. *Hills*—*Haimanti dhan*, *bara* and *chhota mousam* and maize being harvested. *Thrai*—Transplanting of *Haimanti* paddy practically finished. Steeping of jute and *bhadoi* going. Prospects good. Common rice sells as follows:—

				Srs. ch.	
Hills	...	...	...	8 0	} per rupee.
Thrai	...	...	...	9 11	

Maize sells at Darjeeling at 20 seers and at Kalimpong at 34 seers per rupee.

**Kangpur.**—Rainfall at Sadar 8·59, Gaibanda 2·29, Kurigram 7·83, Nilphamari 6·55. Weather cloudy and rainy. Cutting and steeping of jute and transplantation of *aman* going on. Water and fodder sufficient. Common rice sells as follows:—

				Srs. ch.	
Sadar	...	...	...	9 8	} per rupee.
Gaibanda	...	...	...	10 0	
Kurigram	...	...	...	11 0	
Nilphamari	...	...	...	10 8	

**Bogra.**—Rainfall at Sadar 1·25. Fall general. Transplantation of *aman* finished and estimated at cent. per cent. of usual area, coming up well. Harvesting of jute going on. Fodder and water sufficient. Common rice sells at 12 seers per rupee.

**Pabna.**—Rainfall at Sadar 1·99, Sirajganj 3·93. Weather cloudy and rainy. Showers general. Prospects of *aman* and sugarcane fair. Fodder sufficient. No cattle-disease. Common rice sells at 10 seers per rupee.

**Dacca.**—Rainfall at Sadar 1·86, Manikganj 2·75, Munshiganj 1·63, Narayanganj 2. Prospects of crops fair. Weather seasonable. Fodder available. No cattle-disease. Common rice sells at 11 seers per rupee.

**Mymensingh.**—Rainfall at Sadar 2·43, Jamalpur 2·54, Kishorganj 2·93, Notrakona 7·25, Tangail 0·07. Weather seasonable. Jute steeping going on. Transplantation of *aman* nearly over. Fodder scarce in parts. Water sufficient. No cattle-disease. Common rice selling as follows:—

				Srs. ch.	
Sadar	...	...	...	12 0	} per rupee.
Kishorganj	...	...	...	11 4	
Jamalpur	...	...	...	11 7	
Notrakona	...	...	...	12 0	
Tangail	...	...	...	10 8	

**Fariapur.**—Rainfall at Sadar 0·65, Goalundo 3·54, Madaripur 0·10. Weather sultry. State and prospects of crops good. Fodder available. No cattle-disease. Common rice sells at 11 seers the rupee.

**Backergunge.**—Rainfall at Sadar 2·82. Fall general. Weather seasonable. Transplantation of *aman* continues. Prospects fair. Cattle-disease reported from thana Matbari. Fodder sufficient. Common rice sells at 13 seers (*aus*) and 12 seers (*aman*) per rupee.

**Tippura.**—Rainfall at Sadar 3.08, Brahmanbaria 1.19, Chandpur .04. Weather seasonable. Prospects fair. *Aman* paddy thriving but damaged by flood in places. Harvesting of jute and transplantation of *aman* almost completed. Fodder and water sufficient. No cattle-disease. Common rice sells at 14 seers per rupee.

**Noakhali.**—Rainfall at Sadar 1.98, Feni 1.44. Weather seasonable. Harvesting of *amr* nearly finished. Transplantation of *aman* continues. Prospects fair. Condition of betelnut good. No cattle-disease. Fodder and water sufficient. Common rice sells at Sadar at 12 seers, and at Feni at 13 seers per rupee.

**Chittagong.**—Rainfall at Sadar 1.75, Cox's Bazar 4.24. Transplantation of *aman dhan* is still going on. Cattle-disease continuing. Fodder and water sufficient. Rice selling at 12 seers 11 chitaks per rupee.

**Chittagong Hill Tracts.**—Rainfall at Sadar 1.71. Fall general. Weather warm with occasional rain. *Jowar* harvesting continues. Paddy crop good. Cotton and *lil* bad. Common rice selling at 16 seers per rupee. No cattle-disease.

**Patna.**—Rainfall at Sadar 0.85, Bihar 1.58, Dinapore 1.25, Hites 1.70, Bikram 2.63. Weather hot and cloudy. Harvesting of Indian-corn continues. Transplantation of paddy nearly completed. More rain still wanted. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Patna	...	12	0
Barh	...	12	0
Bihar	...	10	0
Dinapore	...	12	4
		} per rupee.	

**Gaya.**—Rainfall at Sadar 2.64, Jahanabad 0.66, Aurangabad 1.09, Nawadah 1.04. Weather hot and cloudy. *Bhadai* crops being harvested. Prospects of standing crops fairly good, if *tertia* rain falls general. No cattle-disease. Fodder and water for cattle ample. Average price of common rice is 11 seers 6 chitaks per rupee.

**Shahabad.**—Rainfall at Sadar 1.31, Buxar 1.71, Bhabhua 2.32, Sasaram 1.16, Dehri 1.50. Weather hot and cloudy. Harvesting of *bhadai* continues. Standing crops doing well. Fodder and water sufficient. No cattle-disease reported. Rice sells at Sadar at 11 seers a rupee.

**Saran.**—Rainfall at Sadar 1.85, Siwan 3.29, Gopalganj 3.85. Weather cloudy and very hot. Standing crops doing well. *Bhadai* crops being harvested in places. Transplantation of paddy nearly finished. More rain wanted. Fodder and water sufficient. No cattle-disease. Common rice sells at 18 seers per rupee.

**Champaran.**—Rainfall at Sadar 8.62, Bettiah 2.83. Weather hot and cloudy. Harvesting and threshing of *bhadai* crops still going on. Prospects good. Cattle-disease reported. Fodder and water sufficient. Common rice sells at 15½ seers and maize at 24½ seers per rupee.

**Muzaffarpur.**—Rainfall at Sadar .46, Hajipur .17, Sitamarhi 2.55. Weather hot and cloudy occasionally. Transplantation of paddy finished. Harvesting of *bhadai* crops continues. Prospects fair. Fodder and water sufficient. Prices are—Common rice sells at 11½, and maize at 22 seers a rupee.

**Darbhanga.**—Rainfall at Sadar 3.53, Samastipur 2.61, Madhubani 2.15. Prospect of standing crops fair. Fodder and water sufficient. Cattle-disease is reported from Daising-sarai police-station. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	12	9
Samastipur	...	13	8
Madhubani	...	11	8
		} per rupee.	

**Monghyr.**—Rainfall at Sadar 0.13, Begusarai .91, Jamui 2.03. Weather hot and cloudy. *Bhadai* harvesting commenced. Sowing of chillies and sweet potatoes going on. Sugarcane and standing crops doing well. Paddy benefited by recent rains. No cattle-disease. Fodder and water ample. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	11	7
Begusarai	...	11	8
Jamui	...	11	0
		} per rupee.	

**Bhagalpur.**—Rainfall at Sadar 4.22, Banka 3.66, Madhipura 7.50, Supaul 8.72. Weather cloudy. Harvesting of *marna* completed and that of *bhadai* nearly completed. Transplantation of *aghani* paddy going on. Prospects good. Water and fodder sufficient. Cattle-disease reported from a few places. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	11	6
Banka	...	12	8
Madhipura	...	13	8
Supaul	...	13	6
		} per rupee.	

**Purnea.**—Rainfall at Sadar 2·54, Araria 3·31, Kishanganj 1·74. Fall general and good. Weather seasonable. Jute being harvested. Prospects of *aghani* paddy good. A few cases of cattle-disease reported from Palasi outpost. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	Ch.	
Sadar ...	10	0	} ( <i>aghani</i> ) } per rupee.
Kishanganj ...	11	0	
Araria ...	14	0	
			( <i>bhadoi</i> )

**Malda.**—Rainfall at Sadar 2·48, Chanchal 3·25, Gajol 3·54, Sibganj 1·87. Fall general. Weather hot and cloudy. Prospects of winter rice good. Harvesting of *bhadoi* completed. Cutting of jute not yet finished. No cattle-disease. Fodder and water sufficient. Common rice sells at 11½ seers per rupee.

**Southal Parganas.**—Rainfall at Sadar 1·01, Deoghur 1·25, Godda 3·67, Jamtara 1·58, Pakur 3·26, Rajmahal 3·15. Weather hot with occasional showers. Standing crops doing well. *Aus dhan* being harvested. Fodder and water sufficient. Common rice sells at Sadar at 12 seers per rupee.

**Cuttack.**—Rainfall at Sadar 1·32. Fall general. Weather seasonable. Early *beati* being cut. Late *beati* and *sarad* progressing well. Prospects fair. No cattle-disease. Fodder and water sufficient. Common rice sells at 13½ seers (old) and 15½ seers (new) per rupee at Sadar.

**Balasore.**—Rainfall at Sadar nil. *Beati* being reaped. *Sarad* being weeded. Prospects good. Standing crops with sugarcane thriving. Rice sells at 13 seers a rupee at Sadar. Fodder and drinking water sufficient. No report from Bhadrak.

**Angul.**—Rainfall at Sadar 0·24, Tikipara 0·92, Bissipara 2·41. Weather hot and cloudy. Weeding of paddy, sowing of *robi* and harvesting of early miscellaneous crops continue. Common rice sells at 12 seers per rupee at Sadar and Khondmals.

**Puri.**—Rainfall 0·63. Weather hot. Weeding of winter rice in progress. Harvesting of *bhadoi* paddy and *mundus* continue. Sugarcane and other miscellaneous crops doing well. Fodder and water-supply sufficient. Common rice sells at 15 seers per rupee. Cattle-disease prevailing at places.

**Hazaribagh.**—Rainfall at Sadar 2·40, Giridih 0·93. Fall not general. Weather seasonable. Harvesting of *bhadoi* going on. Cattle-disease reported from three thanas. Fodder and water sufficient. Common rice sells at 13 seers per rupee.

**Ranchi.**—Rainfall at Sadar 0·28. Weather hot and cloudy. Prospects of crops good. Sowing of *sirgija* continue. Cattle-disease reported from Kanehi, Karra and Sisai thanas. Fodder and water sufficient. Common rice selling at 14 seers per rupee.

**Palamau.**—Rainfall at Sadar 2·01. Weather seasonable. *Bhadoi* harvesting going on. Sugarcane and rice crops doing well. *Robi* fields being prepared. Cattle-disease continues in places. Fodder and water sufficient. Prices at Sadar are—Rice 11½ seers, maize 14 seers per rupee.

**Manbhum.**—Rainfall at Sadar 0·66, Gobindpur 0·64. Weather seasonable. Prospects of crops good. More rain, however, wanted. Fodder and water sufficient. Cattle-disease not reported. Average price of common rice at Sadar is 12 seers, and at Gobindpur 10 seers 6 chitaks per rupee.

**Singbhum.**—Rainfall 0·32. Prospect of crop favourable. Harvesting of *gora* paddy in progress. Average price of rice is 12 seers 6 chitaks per rupee in the district; at Chaibassa 12 seers per rupee.

**General Summary.**—Rain fell during the week in every district except Balasore, and the fall was heavy in parts of North Bengal. The districts of Burdwan, Bankura, Howrah, 24 Parganas, Jessore, Patna, Saran and Manbhum require more rain. Harvesting of *bhadoi* crops still going on. Sugarcane doing well. Transplantation of winter rice is almost finished and sowing of *robi* has commenced at places. Prospects fair. Cattle-disease reported from 13 districts. Fodder and water generally sufficient. The price of common rice has risen in 7 districts, fallen in 10, and is stationary in the rest (30).

By order of the Lieutenant-Governor of Bengal,

W. C. MACPHERSON,

Offg. Secretary to the Govt. of Bengal.

REVENUE DEPARTMENT,

The 23rd September 1902.

**PRICES-CURRENT (*RETAIL*) OF FOOD-GRAINS AND SALT**

**IN THE**

**HEAD-QUARTERS STATION BAZARS OF THE DISTRICTS OF BENGAL  
DURING THE fortnight ending the 18<sup>th</sup> SEPTEMBER 1902.**

PRICES-CURRENT (retail) of Food-grains and Salt in the Head-

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN											
		WHEAT.			BARLEY.			RICE, COMMON.			JOWAR OR ONGON (Sorghum Vulgare).		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
<b>BURDWAN DIVISION.</b>													
1	Burdwan	12 12	12 4	11 8	...	...	...	10 14	10 8	11 4	...	...	...
2	Hatibuni	12 8	12 12	12 0	...	...	...	12 8	11 4	11 4	...	...	...
3	Ranbari	12 0	12 8	11 4	...	...	...	12 0	11 10	11 14	...	...	...
4	Mitrapur	10 0	10 0	10 0	...	...	...	12 0	11 0	10 10	...	...	...
5	Hatibuni	10 8	10 0	10 0	...	...	...	9 4	9 4	9 4	...	...	...
6	Howrah	...	...	...	...	...	...	11 0	11 0	10 0	...	...	...
<b>RAJSHAHY DIVISION.</b>													
7	4-Parganna	...	...	...	...	...	...	10 0	10 0	9 8	...	...	...
8	Chandpur	10 10	12 12	10 10	10 0	14 0	18 0	10 0	10 0	9 14	14 0	16 0	10 12
9	Nadia	12 0	12 4	12 14	12 8	12 0	...	11 0	11 0	11 4	...	...	...
10	Murshidabad	15 8	15 8	13 0	20 4	22 2	20 0	12 8	12 8	10 8	...	...	...
11	Jalpaiguri	11 0	10 0	10 0	10 0	10 10	12 0	12 4	12 4	12 0	...	...	...
12	Khulna	...	...	...	...	...	...	10 12	12 12	10 0	...	...	...
13	Rajshahi	10 8	10 8	12 0	24 0	22 0	18 12	12 0	12 0	9 12	...	...	...
14	Malda	...	14 8	12 0	...	...	12 8	10 12	12 8	9 0	...	...	...
15	Jalpaiguri	11 8	11 0	10 8	...	...	...	11 8	11 0	10 8	...	...	...
16	Darjeeling	...	...	...	...	...	...	10 0	9 8	9 0	...	...	...
17	Rangpur	10 8	10 8	9 8	...	...	...	9 8	10 8	8 0	...	...	...
18	Bogra	10 8	10 8	11 4	...	...	...	12 0	11 4	9 0	...	...	...
19	Falgun	15 12	15 12	16 8	20 0	20 0	22 8	11 4	12 8	9 12	...	...	...
<b>DAKSHIN DIVISION.</b>													
20	Dacca	12 0	12 0	11 0	20 0	20 0	14 0	12 0	12 0	0 2	...	...	...
21	Mymensingh	12 0	12 8	10 0	18 0	12 0	10 0	12 0	11 0	8 0	...	...	...
22	Faridpur	14 8	14 0	13 6	22 0	20 0	15 0	11 8	11 4	9 0	...	...	...
23	Naogaon	...	...	...	...	...	...	12 0	11 4	8 8	...	...	...
		...	...	...	...	...	...	12 8	12 8	11 12	...	...	...

- A. In the subdivisions the retail prices of salt per rupee are—Kalia 11 seers 8 chittaks; Katwa 11 seers 12 chittaks; Raniganj 10½ seers.
- B. At Raniganj the retail price of salt is 11½ seers per rupee.
- C. At Katwa the retail price of salt is 12½ seers per rupee.
- D. In the subdivisions the retail prices of salt per rupee are—Ghatol 10 seers; Tamluk 12 seers; Ghatal 11 seers 7 chittaks.
- E. In the subdivisions the retail prices of salt per rupee are—Serampore 10½ seers; Arambagh 10 seers 10 chittaks.
- F. At Chinsura the retail price of salt is 10 seers 10½ chittaks per rupee.
- G. In the district in the interior of the district the retail prices of salt per rupee are—Chital 10 seers 10 chittaks; Baranagar 11 seers; Badura 11 seers 8 chittaks; Baranagar 10 seers 11½ chittaks.
- H. In the subdivisions the retail prices of salt per rupee are—Kushtia 10½ seers; Chaudanga 10 seers 8 chittaks; Jangal; Mohanpur 10 seers (Karkul); Raniganj 11 seers 4 chittaks (unshaded).
- I. In the subdivisions the retail prices of salt per rupee are—Lalbagh 11 seers; Daud 11 seers; Jangipar 11 seers.
- J. In the subdivisions the retail prices of salt per rupee are—Daud 10½ seers; Daud 11 seers; Daud 10 seers; Daud 10 seers 10 chittaks.



SHARES OF 50 TOTALS.

LADA OR CUMBY Ремонтный флот (сум.)			MADA OR H401 (Stevine Company)		
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.
S. Cl.	S. Cl.	S. Cl.	S. Cl.	S. Cl.	S. Cl.
100	100	100	100	100	100
101	101	101	101	101	101
102	102	102	102	102	102
103	103	103	103	103	103
104	104	104	104	104	104
105	105	105	105	105	105
106	106	106	106	106	106
107	107	107	107	107	107
108	108	108	108	108	108
109	109	109	109	109	109
110	110	110	110	110	110
111	111	111	111	111	111
112	112	112	112	112	112
113	113	113	113	113	113
114	114	114	114	114	114
115	115	115	115	115	115
116	116	116	116	116	116
117	117	117	117	117	117
118	118	118	118	118	118
119	119	119	119	119	119
120	120	120	120	120	120
121	121	121	121	121	121
122	122	122	122	122	122
123	123	123	123	123	123
124	124	124	124	124	124
125	125	125	125	125	125
126	126	126	126	126	126
127	127	127	127	127	127
128	128	128	128	128	128
129	129	129	129	129	129
130	130	130	130	130	130
131	131	131	131	131	131
132	132	132	132	132	132
133	133	133	133	133	133
134	134	134	134	134	134
135	135	135	135	135	135
136	136	136	136	136	136
137	137	137	137	137	137
138	138	138	138	138	138
139	139	139	139	139	139
140	140	140	140	140	140
141	141	141	141	141	141
142	142	142	142	142	142
143	143	143	143	143	143
144	144	144	144	144	144
145	145	145	145	145	145
146	146	146	146	146	146
147	147	147	147	147	147
148	148	148	148	148	148
149	149	149	149	149	149
150	150	150	150	150	150
151	151	151	151	151	151
152	152	152	152	152	152
153	153	153	153	153	153
154	154	154	154	154	154
155	155	155	155	155	155
156	156	156	156	156	156
157	157	157	157	157	157
158	158	158	158	158	158
159	159	159	159	159	159
160	160	160	160	160	160
161	161	161	161	161	161
162	162	162	162	162	162
163	163	163	163	163	163
164	164	164	164	164	164
165	165	165	165	165	165
166	166	166	166	166	166
167	167	167	167	167	167
168	168	168	168	168	168
169	169	169	169	169	169
170	170	170	170	170	170
171	171	171	171	171	171
172	172	172	172	172	172
173	173	173	173	173	173
174	174	174	174	174	174
175	175	175	175	175	175
176	176	176	176	176	176
177	177	177	177	177	177
178	178	178	178	178	178
179	179	179	179	179	179
180	180	180	180	180	180
181	181	181	181	181	181
182	182	182	182	182	182
183	183	183	183	183	183
184	184	184	184	184	184
185	185	185	185	185	185
186	186	186	186	186	186
187	187	187	187	187	187
188	188	188	188	188	188
189	189	189	189	189	189
190	190	190	190	190	190
191	191	191	191	191	191
192	192	192	192	192	192
193	193	193	193	193	193
194	194	194	194	194	194
195	195	195	195	195	195
196	196	196	196	196	196
197	197	197	197	197	197
198	198	198	198	198	198
199	199	199	199	199	199
200	200	200	200	200	200

KARONI OR KAKIN ITALIAN MILLET ( <i>Sesaria italica</i> .)				GRAM, CHANA, BHOLA, KADALU, OR BHOLA, ( <i>Cicer arietinum</i> .)			
Present return.	Next preceding year.	Corresponding turn of last year.		Present return.	Next preceding year.	Corresponding turn of last year.	
S. Ch. S. Ch. S. Ch. S. Ch.	S. Ch. S. Ch. S. Ch. S. Ch.	S. Ch. S. Ch. S. Ch. S. Ch.	S. Ch. S. Ch. S. Ch. S. Ch.	S. Ch. S. Ch. S. Ch. S. Ch.	S. Ch. S. Ch. S. Ch. S. Ch.	S. Ch. S. Ch. S. Ch. S. Ch.	S. Ch. S. Ch. S. Ch. S. Ch.
...	...	...	...	16 12	16 0	14 8	...
...	...	...	...	16 0	16 0	13 0	...
...	...	...	...	14 8	15 0	13 2	...
...	...	...	...	14 8	14 8	13 0	...
...	...	...	...	12 0	12 0	12 8	...
...	...	...	...	14 0	14 0	13 0	...
...	...	...	...	14 0	13 12	14 0	...
8 0	8 6	10 0	...	14 0	14 6	13 0	...
...	...	...	...	20 0	20 0	14 15	...
...	...	...	...	21 0	21 8	13 8	...
...	...	...	...	17 0	18 0	12 0	...
...	...	...	...	13 0	14 8	9 8	...
...	...	...	...	22 8	21 0	13 8	...
...	...	...	...	17 1	16 8	14 8	...
...	...	...	...	14 0	14 0	13 0	...
...	...	...	...	11 0	11 0	10 0	...
...	...	...	...	16 0	16 0	12 8	...
...	...	...	...	15 0	15 0	12 0	...
...	...	...	...	16 0	16 0	12 0	...
...	...	...	...	10 0	10 8	11 12	...
...	...	...	...	13 5	12 8	10 0	...
...	...	...	...	16 0	16 0	12 0	...
...	...	...	...	12 0	12 0	7 8	...

Quarterly Station Reports of the Districts of Bengal on the 15th September 1902.

INDIAN-CORON MILLS (S. M. S.)			ARRAR DE TRON, CANTON P. S. (P. S. M. S.)			SALT.			WHOLESALE PRICES PER MAUND OF 40 SEKERS.			DISTRICTS.	Number.
Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.		
S. M. S.	S. M. S.	S. M. S.	S. M. S.	S. M. S.	S. M. S.	S. M. S.	S. M. S.	S. M. S.	S. M. S.	S. M. S.	S. M. S.	BENGAL.	
...	...	...	...	...	...	...	...	...	...	...	...	Burdwan.	1
...	...	...	...	...	...	...	...	...	...	...	...	Birbhum.	2
...	...	...	...	...	...	...	...	...	...	...	...	Bansberia.	3
...	...	...	...	...	...	...	...	...	...	...	...	Midnapore.	4
...	...	...	...	...	...	...	...	...	...	...	...	Hooghly.	5
...	...	...	...	...	...	...	...	...	...	...	...	Howrah.	6
...	...	...	...	...	...	...	...	...	...	...	...	24-Parganas.	7
17 0	17 0	14 0	9 6	9 0	10 0	11 0	11 0	11 0	11 0	11 0	11 0	Calcutta.	8
...	...	...	...	...	...	...	...	...	...	...	...	Nadia.	9
...	...	...	...	...	...	...	...	...	...	...	...	Murshidabad.	10
...	...	...	...	...	...	...	...	...	...	...	...	Jessore.	11
...	...	...	...	...	...	...	...	...	...	...	...	Khulna.	12
...	...	...	...	...	...	...	...	...	...	...	...	Rajshahi.	13
...	...	...	...	...	...	...	...	...	...	...	...	Dinajpur.	14
...	...	...	...	...	...	...	...	...	...	...	...	Jalpaiguri.	15
22 0	20 0	24 10	6 8	7 4	6 8	8 8	8 8	8 8	8 8	8 8	8 8	Darjeeling.	16
13 0	13 0	11 8	10 0	10 0	6 12	10 8	10 8	10 8	10 8	10 8	10 8	Rangpur.	17
...	...	...	...	...	...	...	...	...	...	...	...	Sayra.	18
...	...	...	...	...	...	...	...	...	...	...	...	Patna.	19
...	...	...	...	...	...	...	...	...	...	...	...	Dumka.	20
...	...	...	...	...	...	...	...	...	...	...	...	Myerpoor.	21
...	...	...	...	...	...	...	...	...	...	...	...	Faridpur.	22
...	...	...	...	...	...	...	...	...	...	...	...	Backergunge.	23

K. In the subdivisions the retail price of salt per rupee are—Bagerhat 10 seers; Bakthura 11 seers.  
 L. In the subdivisions the retail price of salt per rupee are—Mafur 10 seers 8 chittaks; Narghoo 9 seers.  
 M. No report from subdivisions.  
 N. At Alipur Dwar the retail price of salt is 8 seers per rupee.  
 O. The retail price of salt (panga) at Karmang is 8 seers per rupee; Nigami 9 seers.  
 P. In the subdivisions the retail price of salt per rupee are—Gaidanda 10 seers; Karigram 8 seers; Mithamari 10 seers.  
 Q. At Suraganj the retail price of salt is 11 seers 10 chittaks per rupee.  
 R. In the parts in the interior of the district the retail price of salt per rupee are—Madanganj 11 seers 13 chittaks; Manikganj 9 seers; Mirzadul 11 seers 6 chittaks.  
 S. In the subdivisions the retail price of salt per rupee are—Kishoreganj 10 seers 11 chittaks; Jamalpur 10 seers 6 chittaks; Tangail 9 seers; Natorekora 10 seers 12 chittaks.  
 T. In the subdivisions the retail price of salt per rupee are—Himalguda 10 seers; Madaripur 10 seers (crushed).  
 U. In the subdivisions the retail price of salt per rupee are—Pirojpur 10 seers; Purnakhal 9 seers; Bhola 10 seers.

## PRICES-CURRENT (retail) of Food-grains and Salt in the Head-quarters

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN											
		WHEAT.			BARLEY.			RICE, COMMON.			JOWAR OR CHOLAK (Sorghum Vulgare).		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
MUNGAAL—continued.		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Curry-churn Division.	24 Tiptara	...	...	...	...	...	...	14 0	13 0	10 0	...	...	...
	25 Nookhail	...	...	...	...	...	...	11 8	11 0	10 0	...	...	...
	26 Chittagong	...	...	...	...	...	...	12 11	12 11	10 8	...	...	...
WIMAR.													
Fatta Division.	27 Fatta	14 0	14 0	14 0	19 12	19 0	19 0	12 0	11 0	10 0	White 16 0, 18 0, 20 0; Golden 7 4, 10 0	...	...
	28 Gaya	13 4	13 0	13 0	18 0	17 0	17 0	10 12	11 0	10 12	...	15 0	16 0
	29 Bhakatal	12 0	12 0	12 0	20 0	20 0	18 0	11 8	11 8	10 4	...	...	...
	30 Barua	16 0	15 0	15 0	24 0	20 0	17 0	12 8	12 0	10 8	...	...	...
	31 Chhatrapur	15 8	15 0	15 0	22 0 to 24 0	20 0	18 0	15 8	14 0	10 8	...	...	...
	32 Munshipur	14 0	14 0	14 0	18 0	18 0	18 0	11 8	11 8	11 0	...	...	...
	33 Durtanaga	12 8	14 4	13 8	19 12	19 12	...	12 8	12 0	13 8	...	...	...
	34 Monghyr	15 8	14 8	14 11	22 0	20 0	18 12	10 8	10 8	12 0	...	...	...
	35 Bhagalpur	13 14	13 14	13 4	19 0	18 0	20 8	11 10	12 6	11 4	...	...	...
	36 Faridkot	14 0	14 0	14 0	...	...	...	11 0 to 13 0	10 8 to 11 0	10 0	...	...	...
Bhadrachal Division.	37 Malda	15 0	16 0	...	...	...	...	12 8	12 0	10 0	...	...	...
	38 Moulvibazar	11 8	11 8	10 8	15 0	15 0	15 0	13 0	12 0	14 8	...	...	...
CHITTAGONG.													
Chittagong Division.	39 Chittagong	11 2	11 12	11 8	...	...	...	14 7	13 4	11 18	...	...	...
	40 Balasore	14 0	14 0	...	...	...	...	14 0	12 8 to 14 0	10 8 to 11 0	...	...	...
	41 Angul	...	...	...	...	...	...	12 0	12 0	...	...	...	...
	42 Puri	10 8	10 10	10 8	...	...	...	15 0	14 7	11 18	...	...	...
CHITTA NAUPUR.													
Chittra Naupur Division.	43 Harnach	10 12	10 12	11 0	13 8	13 8	10 0	10 12	10 12	11 0	...	...	...
	44 Harnach	8 8 to 10 8	8 0 to 10 8	8 0 to 11 0	11 0 to 14 0	14 0 to 15 0	14 0	14 0	14 0	12 8	...	...	...
	45 Palamau	11 4	10 16	9 0	14 1	14 1	13 8	12 6	20 8	9 0	...	...	...
	46 Harnach	12 0	12 0	12 0	16 0	16 0	16 0	13 8	12 4	11 8	20 0	20 0	...
	47 Bhagbhum	11 0	11 0	10 0	...	...	...	12 0	12 0	13 0	...	...	...

- V. In the subdivisions the retail prices of salt per rupee are—Chandpur 9 seers; Bhadrachal 10 seers.  
W. At Faridkot the retail price of salt is 10 seers per rupee.  
X. Return from Govt. Bazar not received.  
Y. In the subdivisions the retail prices of salt per rupee are—Barua 11½ seers; Dinapore 10½ seers; Barua 10 seers.  
Z. In the subdivisions the retail prices of salt per rupee are—Jahangabad 10 seers; Nawada 10 seers; Aurangabad return not received.  
a. In the subdivisions the retail prices of salt per rupee are—Buxar 10 seers; Bhadrachal 10½ seers; Barua 11 seers.  
b. In the subdivisions the retail prices of salt per rupee are—Buxar 11 seers 6 chittas; Gopalganj (Mirganj) 12 seers 2 chittas.  
c. At Bettiah the retail price of salt is 10½ seers per rupee.  
d. In the subdivisions the retail prices of salt per rupee are—Hajipur 10½ seers; Sitamarhi 12 seers.  
e. In the subdivisions the retail prices of salt per rupee are—Samastipur 10 seers; Madhubani 10 seers 6 chittas.  
f. In the subdivisions the retail prices of salt per rupee are—Begunah 10½ seers; Jaisi 10 seers 6 chittas.

TERS OF 88 TOLARS.

BANK OF COMMERCE. <i>Penetration typhoid.</i> (1900.)				MARCA DE RAOI. <i>(Eigens Corporation.)</i>			
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.		Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	
Ch. S.	Ch. S.	Ch.		Ch. S.	Ch. S.	Ch.	
121	121	121		121	121	121	
122	122	122		122	122	122	
123	123	123		123	123	123	
124	124	124		124	124	124	
125	125	125		125	125	125	
126	126	126		126	126	126	
127	127	127		127	127	127	
128	128	128		128	128	128	
129	129	129		129	129	129	
130	130	130		130	130	130	
131	131	131		131	131	131	
132	132	132		132	132	132	
133	133	133		133	133	133	
134	134	134		134	134	134	
135	135	135		135	135	135	
136	136	136		136	136	136	
137	137	137		137	137	137	
138	138	138		138	138	138	
139	139	139		139	139	139	
140	140	140		140	140	140	
141	141	141		141	141	141	
142	142	142		142	142	142	
143	143	143		143	143	143	
144	144	144		144	144	144	
145	145	145		145	145	145	
146	146	146		146	146	146	
147	147	147		147	147	147	
148	148	148		148	148	148	
149	149	149		149	149	149	
150	150	150		150	150	150	
151	151	151		151	151	151	
152	152	152		152	152	152	
153	153	153		153	153	153	
154	154	154		154	154	154	
155	155	155		155	155	155	
156	156	156		156	156	156	
157	157	157		157	157	157	
158	158	158		158	158	158	
159	159	159		159	159	159	
160	160	160		160	160	160	
161	161	161		161	161	161	
162	162	162		162	162	162	
163	163	163		163	163	163	
164	164	164		164	164	164	
165	165	165		165	165	165	
166	166	166		166	166	166	
167	167	167		167	167	167	
168	168	168		168	168	168	
169	169	169		169	169	169	
170	170	170		170	170	170	
171	171	171		171	171	171	
172	172	172		172	172	172	
173	173	173		173	173	173	
174	174	174		174	174	174	
175	175	175		175	175	175	
176	176	176		176	176	176	
177	177	177		177	177	177	
178	178	178		178	178	178	
179	179	179		179	179	179	
180	180	180		180	180	180	
181	181	181		181	181	181	
182	182	182		182	182	182	
183	183	183		183	183	183	
184	184	184		184	184	184	
185	185	185		185	185	185	
186	186	186		186	186	186	
187	187	187		187	187	187	
188	188	188		188	188	188	
189	189	189		189	189	189	
190	190	190		190	190	190	
191	191	191		191	191	191	
192	192	192		192	192	192	
193	193	193		193	193	193	
194	194	194		194	194	194	
195	195	195		195	195	195	
196	196	196		196	196	196	
197	197	197		197	197	197	
198	198	198		198	198	198	
199	199	199		199	199	199	
200	200	200		200	200	200	



Station Basars of the Districts of Bengal on the 15th September 1902—concl'd.

WHOLESALE PRICES PER MAUND OF 40 SEERS.										DISTRICTS.		Number.	
INDIAN-CORN OR MAIZE. (See notes.)			ARAB OR TRUF, CADIAN PRA. (Dajwan Indian.)			SALT.			SALT.				
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	R. A. P.	R. A. P.	R. A. P.	BENGAL—continued	
...	...	...	...	...	...	10 0	10 0	9 5 14 0	8 14 0	4 8 0	4 8 0	Tripura.	24
...	...	...	...	...	...	9 0	9 8	8 0 11 2 0	4 2 0	4 8 0	4 8 0	Nankhali.	25
...	...	...	8 0	8 0	8 10	12 0	10 0	9 8 4 6 0	3 6 4	3 14 1	3 14 1	Chittagong.	26
Bihar.													
28 0	31 0	18 0	22 0	17 0	15 8	10 12	10 4	10 2 2 11 0	4 11 0	3 12 0	3 12 0	Patna.	27
31 0	18 0	18 4	16 12	15 12	15 8	11 0	11 0	10 3 2 9 0	3 9 6	3 13 0	3 13 0	Gaya.	28
25 0	18 0	...	12 0	12 0	11 0	10 0	10 0	10 8 1 0 0	4 0 0	3 13 0	3 13 0	Shahabad.	29
30 0	30 0	18 0	31 0	15 3	12 0	11 0	11 0	10 4 9 10 4	3 10 2	3 14 0	3 14 0	Baran.	30
12 0	22 0	21 0	22 0	22 0	19 8	10 8	10 8	10 0 8 13 4	3 13 0	4 0 0	4 0 0	Champan.	31
32 0	30 0	20 0	18 0	13 8	13 0	10 0	10 0	9 13 14 0 0	4 0 0	4 0 0	4 0 0	Munfarpur.	32
24 4	32 0	24 3	18 8	14 4	12 0	11 0	11 0	10 0 13 10 0	3 10 8	3 8 0	3 8 0	Darbhanga.	33
26 0	29 0	19 15	11 0	11 0	17 18	10 0	10 0	10 3 4 0 0	3 14 8	3 8 0	3 8 0	Monghyr.	34
21 8	31 8	20 0	12 10	12 10	10 8	10 12	10 12	10 0 13 10 0	3 10 0	3 12 0	3 12 0	Shahpur.	35
...	...	...	10 0	10 0	8 0	10 0	9 8	10 14 0 0	4 0 0	4 0 0	4 0 0	Purnea.	36
32 0	...	20 0	13 0	13 0	0 8	10 0	10 0	9 8 12 0 0	3 14 0	4 0 0	4 0 0	Malda.	37
New 63 0	...	15 0	18 0	18 0	11 8	10 8	10 8	10 0 13 10 0	3 10 0	3 12 0	3 12 0	South Parganna.	38
Orissa.													
...	...	...	15 1	15 1	13 2	13 0	13 0	13 0 3 0 0	3 0 0	3 2 0	3 2 0	Cuttack.	39
...	...	...	10 0	10 12	8 0 to 9 8	11 0	11 0	10 8 3 5 0	3 5 0	3 12 0	3 12 0	Balasore.	40
...	...	...	15 0	15 0	...	7 8	8 0	...	...	...	...	Angul.	41
...	...	...	10 8	9 3	7 4	15 0	15 0	13 8 13 1 0	3 1 0	2 14 0	2 14 0	Puri.	42
CHOTA NAGPUR.													
14 8	14 8	16 0	9 8	9 8	9 0	8 8	8 8	8 0 14 7 0	4 7 0	5 0 0	5 0 0	Hambergh.	43
17 0	17 0	14 0	8 0 to 8 8	8 0 to 8 8	8 12	9 12	9 12	9 0 14 1 0	4 1 0	4 5 0	4 5 0	Ranchi.	44
12 3	13 3	11 18	11 4	11 4	10 2	10 2	10 2	8 7 1 ...	...	...	...	Palamu.	45
20 0	...	...	12 0	11 6	10 0	10 12	10 10	10 0 3 8 0	3 10 0	3 14 0	3 14 0	Manbhum.	46
...	...	...	10 0	10 0	8 0	9 0	9 0	9 0 4 4 0	4 4 0	3 8 0	3 8 0	Boghrum.	47

g. In the subdivisions the retail prices of salt per rupee are—Banka 10 seers; Madhipura 10 seers; Shapal 10 seers.  
 h. In the subdivisions the retail prices of salt per rupee are—Kishanganj 9 seers; Arraria 9 seers.  
 i. At Ballia Nawabganj the retail price of salt is 10 seers per rupee.  
 j. In the subdivisions the retail prices of salt per rupee are—Boghrat 10 seers (panga); Godda 10 seers; Jantara 11 seers; Panskura 11 seers (Kachak); Rajmahal 11 seers.  
 k. In the subdivisions the retail prices of salt per rupee are—Jajpur 10 seers 8 chitaks (panga); Kendrapara 10 seers (panga).  
 l. At Bhadrak the retail price of salt is 10½ seers per rupee.  
 m. In the parts in the interior of the district the retail prices of salt per rupee are—Bankpur 8½ seers; Rimpura 9 seers.  
 n. At Khurda the retail price of salt is 13 seers per rupee.  
 o. Gokindpur returns not received.

Published for general information.

W. C. MACPHERSON,

## PRICES-CURRENT (wholesale) of Food-grains, Firewood, &amp;c.

Number.	Market.	RICE (white unpol.)			COMMON RICE (medium)			WHEAT ( <i>Triticum sativum</i> )			BAHUNT ( <i>Bahunt vulgaris</i> )		
		RICE (white unpol.)			COMMON RICE (medium)			WHEAT ( <i>Triticum sativum</i> )			BAHUNT ( <i>Bahunt vulgaris</i> )		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Calcutta	5 4 0	5 4 0	5 4 0	3 12 0	3 12 0	4 4 0	3 8 0	3 0	3 6 0	3 8 0	3 6 0	2 6 0
2	Burdwan	4 12 0	5 0 0	4 12 0	3 0 0	3 11 0	3 8 0	...	...	...	...	...	...
3	Midnapore	4 0 0	4 0 0	4 8 0	3 4 0	3 5 0	3 10 0	...	...	...	...	...	...
4	Patna	6 10 0	6 10 0	6 11 0	3 5 6	3 6 0	4 0 0	2 8 0	2 8 6	2 8 0	...	...	...
5	Rangpur	6 0 0	6 0 0	7 0 0	4 0 0	3 12 0	4 8 0	3 12 0	3 12 0	3 12 0	...	...	...
6	Dacca	4 0 0	4 0 0	5 8 0	3 6 0	3 4 0	4 12 0	3 4 0	3 4 0	3 8 0	2 0 0	2 0 0	2 12 0
7	Chittagong	...	...	...	3 0 0	3 6 0	3 12 0	...	...	...	...	...	...
8	Patna	3 15 0	3 12 0	4 2 8	3 4 0	3 10 0	3 5 6	2 13 0	2 13 6	2 12 0	2 0 0	2 1 0	2 1 0
9	Muzaffarpur	5 0 0	5 0 0	4 7 0	3 5 8	3 5 8	3 5 5	2 12 0	2 12 0	3 3 0	...	2 0 0	2 13 6
10	Bhagalpur	4 8 0	4 8 0	4 8 0	3 10 0	3 8 0	3 6 8	2 14 0	2 14 0	3 0 0	2 0 6	2 0 0	2 0 0
11	Cuttack	4 4 0	4 4 0	3 18 4	2 13 6	2 13 0	3 3 0	2 4 6	3 3 0	3 6 0	...	...	...
12	Ranchi	4 10 0	4 10 0	4 2 8	2 13 6	2 13 6	2 15 0	4 8 0 to 5 0 0	4 8 0 to 5 0 0	3 10 0 to 5 0 0	3 10 0	2 13 6	2 13 6 to 2 14 6

CALCUTTA,

The 22nd September 1902.



JAMB OR CHOLUR ( <i>Sorghum vulgare</i> ).			RAJRA OR GUMBU ( <i>Pennisetum typhoides</i> ).			MARJA OR BADI ( <i>Echinochloa crusgalli</i> ).			GRAM, CHANA, CHOLA, KADALI, OR BUNABA ( <i>Cyperus arundinaceus</i> ).		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
15	16	17	18	19	20	21	22	23	24	25	26
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
2 8 0	2 8 0	2 8 0	2 8 0	2 8 0	2 8 0	2 8 0	2 8 0	2 8 0	2 8 0	2 8 0	2 12 0
"	"	"	"	"	"	"	"	"	2 8 0	2 8 0	2 12 0
"	"	"	"	"	"	"	"	"	2 8 0	2 8 0	2 8 0
"	"	"	"	"	"	"	"	"	2 10 0	2 10 0	2 8 0
"	"	"	"	"	"	"	"	"	2 8 0	2 8 0	2 2 0
"	"	"	"	"	"	"	"	"	4 0 0	4 0 0	3 8 0
"	"	"	"	"	"	"	"	"	3 8 0	3 8 0	3 14 0
White. 2 7 0	2 7 0	2 8 0	"	"	"	"	"	"	2 15 0	2 15 0	2 8 0
Kalam. 2 7 0	1 10 0	"	"	"	"	1 10 0	1 12 0	1 9 0	2 0 0	2 0 0	2 5 0
"	"	"	"	"	"	"	"	"	2 4 0	2 4 0	2 10 0
"	"	"	"	"	"	"	"	"	2 5 0	2 5 0	2 14 0
"	"	"	"	"	"	"	"	"	2 1 0	2 1 0	2 8 0
"	"	"	"	"	"	"	"	"	2 4 7	2 4 7	2 7 0

PRICE PER MAUND											
INDIAN ONION OR MAISE (Zea mays).			ARJUN DAL OR THUN-- CAJAN PEA (Cajanus indicus).			LINSEED.			MUSTARD AND RAPESEED.		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
27	28	29	30	31	32	33	34	35	36	37	38
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
2 4 0	2 2 0	2 10 0	4 0 0	4 4 0	3 12 0	5 12 0	5 12 0	7 0 0	5 0 0	5 0 0	4 12 0
"	"	"	5 3 0	5 8 0	3 12 0	"	"	"	4 4 0	4 6 0	4 4 0
"	"	"	4 0 0	4 2 0	4 12 0	5 3 0	5 8 0	5 8 0	4 10 0	4 10 0	4 0 0
"	"	"	4 5 0	4 5 0	5 6 0	4 8 0	4 8 0	5 0 0	4 12 0	4 12 0	5 4 0
3 2 0	3 2 0	3 4 0	4 0 0	4 0 0	5 4 0	"	"	"	4 12 0	4 14 0	4 4 0
"	"	"	4 0 0	4 0 0	4 4 0	"	"	"	4 4 0	4 4 0	5 4 0
"	"	"	4 6 0	4 12 0	5 4 0	"	"	"	4 5 0	4 8 0	3 4 0
1 17 6	1 14 0	2 1 0	1 18 0	2 5 0	2 8 0	5 0 0	5 0 0	5 10 0	4 8 0	4 8 0	5 0 0
1 11 9	1 15 3	1 14 6	2 15 3	2 13 9	2 15 3	"	"	"	"	"	"
1 14 6	1 14 6	1 15 0	3 2 0	3 2 0	3 12 0	5 0 0	5 8 0	"	4 0 0	4 0 0	5 4 0
"	"	"	2 8 0	2 7 0	2 14 8	"	"	"	4 4 0	4 4 0	4 4 0
"	"	"	5 2 8	5 2 6	5 14 0	5 10 0	5 10 0	5 0 0	5 0 0	5 0 0	5 4 0
"	"	"	5 10 0	5 10 0	5 10 0	5 10 0	5 10 0	5 0 0	5 0 0	5 0 0	5 4 0

STANDARD BEERS.

TIL OF JINTELL AKED.			SUDAN (RAW).			COTTON, CLEANED.			JUTE		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
40	41	42	43	44	45	46	47	48	49	50	51
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
4 5 0	4 12 0	4 12 0	4 4 0	4 4 0	4 0 0	15 0 0	15 0 0	17 0 0	5 4 0	5 4 0	4 12 0
...	...	...	4 0 0	4 0 0	4 4 0	50 0 0	20 0 0	17 19 0	...	...	...
...	...	...	{ 3 4 0 3 8 0 }	{ 3 4 0 3 8 0 }	{ 3 8 0 4 0 0 }	20 0 0	20 0 0	27 0 0	...	...	...
...	...	...	3 18 0	3 10 0	4 8 0	31 0 0	21 0 0	20 0 0	4 14 0	5 2 8	5 0 0
...	...	...	4 0 0	4 0 0	5 4 0	...	...	...	4 8 0	4 0 0	5 0 0
...	...	...	4 4 0	4 2 0	5 14 0	...	...	...	4 8 0	4 8 0	5 0 0
...	...	...	4 12 0	5 0 0	5 10 0	14 8 0	14 8 0	14 8 0	...	...	...
3 17 0	5 10 0	4 14 0	2 12 0	2 19 0	3 8 0	15 0 0	15 0 0	16 0 0	3 8 0	4 4 0	3 12 0
...	...	...	2 10 8	2 10 5	3 10 0	...	...	...	...	...	...
...	...	...	4 1 0	4 1 0	5 5 0	19 0 0	19 0 0	17 0 0	...	...	...
4 8 0	4 1 0	4 8 0	4 8 0	4 8 0	4 8 0	20 0 0	20 0 0	22 0 0	...	...	...
...	...	...	{ 4 0 0 4 7 0 }	4 0 0	{ 4 0 0 5 8 0 }	20 0 0	20 0 0	22 13 0	...	...	...

Gut (Clarified Butter).			Tobacco Leaf.			Hides (cow).			Grain.		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
51	52	53	54	55	56	57	58	59	60	61	62
Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.	Ra. A. F.
29 0 0	29 0 0	40 0 0	9 0 0	8 8 0	9 0 0	250 0 0	250 0 0	250 0 0	0 14 0	1 0 0	0 13 0
28 0 0	30 0 0	41 0 0	...	Madhukhan.	...	Uncleaned hide per piece.			...	...	...
...	...	...	...	...	...	1 0 0	1 0 0	1 0 0	...	...	...
...	...	...	...	...	...	to	to	to	...	...	...
...	...	...	...	...	...	2 8 0	2 8 0	2 2 0	...	...	...
...	...	...	...	...	...	Cleaned hide per piece.			...	...	...
...	...	...	...	...	...	1 4 0	1 4 0	1 2 0	...	...	...
...	...	...	...	...	...	2 12 0	2 12 0	2 4 0	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	0 2 2	0 2 0	0 1 0
...	...	...	...	...	...	Per maund.			...	...	...
...	...	...	...	...	...	25 0 0	25 0 0	25 0 0	0 4 0	0 3 0	0 1 0
...	...	...	...	...	...	Per maund.			...	...	...
...	...	...	...	...	...	16 0 0	16 0 0	16 4 0	...	...	...
...	...	...	...	...	...	...	...	...	0 4 0	0 3 0	0 1 0
...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	Per maund.			...	...	...
...	...	...	...	...	...	25 0 0	25 0 0	25 0 0	0 7 0	0 7 0	0 1 0
...	...	...	...	...	...	Per piece.			...	...	...
...	...	...	...	...	...	1 0 0	1 0 0	1 4 0	...	...	...
...	...	...	...	...	...	to	to	to	...	...	...
...	...	...	...	...	...	1 0 0	1 0 0	2 4 0	0 2 2	0 2 2	0 1 0

the undermentioned *Marts* of Bengal on the 15th September 1902.

STRAW.			JUAR STALKS.			PRICES PER MAUND OF 40 STANDARD SHEES.												MART.
						LUMK.			FIREWOOD.			BALK.						
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.				
65	64	63	66	67	68	69	70	71	72	73	74	75	76	77	78			
A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.				
12 0	0 12 0	0 14 0	...	...	...	5 12 0	5 12 0	5 4 0	0 8 0	0 8 0	0 8 0	3 6 0	3 6 0	3 8 0	1. Calcutta			
13 0	0 12 0	0 14 0	...	...	...	...	...	...	0 8 0	0 8 0	0 8 0	3 4 0	3 4 0	3 10 0	2. Bardwan.			
4 8	0 4 8	0 9 6	...	...	...	8 12 0 4 4 0	8 12 0 4 4 0	4 0 0 5 0 0	0 4 0	0 4 0	0 4 0	3 8 0	3 8 0	3 11 0	3. Midnapore.			
4 0	1 0 0	1 8 0	...	...	...	7 0 0	7 0 0	7 4 0	0 10 0	0 10 0	0 8 0	3 12 0	3 12 0	0 13 0	4. Patna.			
7 0	0 7 0	0 7 0	...	...	...	7 0 0	7 0 0	7 0 0	0 8 0	0 8 0	0 8 0	3 12 0	3 12 0	0 4 0	5. Rangpur.			
1	...	...	...	...	...	5 0 0	5 0 0	6 0 0	0 8 3	0 8 3	0 6 3	3 12 0	3 10 0	0 14 0	6. Dacca.			
1	...	...	...	...	...	4 12 0	4 12 0	5 6 0	...	...	...	3 0 0	3 0 0	0 14 0	7. Chittagong.			
1	...	...	...	...	...	4 0 0	5 0 0	5 0 0	0 7 0	0 7 0	0 8 0	3 11 0	3 11 0	0 12 0	8. Patna.			
0	...	...	...	...	...	5 11 6	5 11 6	5 11 6	5 4 0	0 4 0	0 4 0	4 0 0	0 4 0	0 4 0	9. Muzaffarpur.			
1	...	...	...	...	...	5 0 0	5 0 0	5 0 0	0 8 0	0 8 0	0 8 0	3 10 0	3 10 0	0 12 0	10. Bhagalpur.			
7 0	0 7 0	0 8 0	...	...	...	4 8 0	4 11 0	4 8 0	0 4 0	0 4 0	0 4 0	3 0 0	3 0 0	0 3 2 0	11. Cuttack.			
15 0	0 9 0	...	...	...	...	5 10 0	5 10 0	5 0 0	0 4 0	0 4 0	0 4 0	4 1 0	4 1 0	0 4 0	12. Ranchi.			

W. C. MACPHERSON,  
Offg. Secretary to the Govt. of Bengal.

GOVERNMENT OF BENGAL, IRRIGATION DEPARTMENT.

Approximate return of traffic on the Circular and Eastern Canals for the week ending Saturday, the 30th September 1902, as compared with the corresponding week of the previous year.

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 30th SEPTEMBER 1902.			WEEK ENDING SATURDAY, THE 31st SEPTEMBER 1901.		
	Number of bunde.	Weight of cargo.	Tonnage.	Number of bunde.	Weight of cargo.	Tonnage.
		Mds.	Ms.		Mds.	Ms.
Rice and paddy	658	85,786	1,283	473	60,620	905
Jute	298	57,475*	856	271	59,775†	874
Firewood	51	33,820	498	98	52,760	796
Other articles	711	1,64,887‡	2,029	608	1,07,060	1,412
Total	1,721	2,41,968‡	4,666	1,349	2,80,215	3,887

\* Weight by canal measurement, 5,786½ mands.  
† Ditto ditto, 57,52½ "

## Results of the Meteorological Observations taken at the Alipore Observatory from 14th to 20th September 1902.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				Wind.		Rain.	Weather.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
1902.				Inches.	"	"	"	"	Inches.	"	"	%			Inches.	
Sept.	14th	148.8	5.6	29.747	84.8	90.2	10.7	78.5	81.4	1.034	80.3	88	S by W and SSW	85	0.42	Partially cloudy, o, p.
"	15th	151.7	8.3	746	84.6	89.9	9.7	80.2	81.7	1.048	80.5	86	SSW, SW by W and SW by S.	66	Nil	Chiefly cloudy.
"	16th	150.4	6.1	777	84.0	90.9	11.1	79.9	81.2	1.028	80.1	89	SW by S, SSE and calm.	29	0.31	Partially cloudy, o, t, p.
"	17th	151.2	5.6	778	83.6	90.3	11.4	78.8	80.8	1.017	79.7	89	ESE, SE and calm	11	0.09	Partially cloudy, d.
"	18th	148.2	4.1	776	84.6	90.7	11.9	78.8	80.8	1.066	79.4	85	SE and S by W ...	34	Nil	Chiefly cloudy.
"	19th	151.1	6.3	808	84.0	91.2	12.9	78.8	80.4	0.991	79.9	85	SE and calm ...	58	0.01	Partially cloudy, d.
"	20th	148.4	7.0	772	84.1	90.7	12.3	78.5	79.1	.928	77.0	79	SSW and calm ...	64	0.71	Partially cloudy, o, g, p, t, d.

The mean pressure of the seven days ... .. 29.772

The average pressure of the corresponding period for 24 years, Surveyor-General's Office ... .. 29.879

The total number of hours of bright sunshine ... .. 86.9

The maximum possible number of hours of sunshine ... .. 86.4

The mean temperature of the seven days ... .. 84.2

The average temperature of the corresponding period for 24 years, Surveyor-General's Office ... .. 83.3

The extreme variation of temperature ... .. 12.9

The maximum temperature ... .. 91.2

The highest velocity of the wind in one hour ... .. 10

The mean relative humidity ... .. 86

The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office ... .. 86

The total fall of rain from 14th to 20th September 1902 ... .. 1.44

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... .. 2.31

The total fall from 1st January to 20th September 1902 ... .. 68.16

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... .. 55.95

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from eye observations.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Alipore Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; d, drizzling rain; t, thunder; p, passing temporary showers; g, gloomy; +, lightning.

N.B.—In the weekly abstract from 31st August to 6th September 1902, read 29.858 for 29.88 as the mean pressure barometer on the 5th September 1902.

G. W. KUCHLER,

for Meteorological Reporter to the Govt. of India  
and Director-General of Indian Observatories.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;  
Alipore (Calcutta), the 22nd September 1902.

## EASTERN BENGAL STATE RAILWAY,

Abstract of Principal Commodities carried over the Eastern Bengal State Railway during the month of June 1902 as compared with the same month of the previous year.

No.	COMMODITY	1901.	1902.	INCREASE in 1902.	DECREASE in 1902.	EXPLANATION OF FLUCTUATIONS BY PALESTINE SUPERINTENDENT.
		Tons.	Tons.	Tons.	Tons.	
1	Apparel, including dressery, haberdashery, millinery, uniforms, accessories, boots and shoes.	57	10	11		
2	Coal and coke carried for the Public and Foreign Railways.	21,800	21,345		455	
3	Cotton—					
(1)	Raw	200	201	1		
(2)	Manufactured—					
(a)	Twist and yarn, European	317	345	28		
(b)	Do., Indian	328	347	19		
(c)	Piece-goods, European	1,870	1,689		181	
(d)	Do., Indian	185	85		100	
(e)	Others	63	12		51	
4	Chemicals, excepting salt-petre					
5	Drugs—					
(1)	Intoxicating, other than opium	11	44	33		
(2)	Non-intoxicating—					
(a)	Medicinal preparations	41	56	15		
(b)	Others					
6	Dyes and Tans—					
(1)	Al (Morinda, etc.)					
(2)	Alumina and Aniline dye	30	2		28	
(3)	Indigo					
(4)	Logwood					
(5)	Myrobolans					
(6)	Tanning bark	458	386		72	
(7)	Turnsole	12	10		2	
(8)	Others					
7	Fodder—					
(1)	Straw	985	817		168	
(2)	Hay, straw and green	1,485	1,433		52	
8	Fruit and vegetables, fresh	200	200			
9	Grain and pulses—					
(1)	Wheat and pulse	5,025	5,030	5		
(2)	Barley and maize	5,338	5,315		23	
(3)	Rice in the husk	5,927	5,941	14		
(4)	Do. not in the husk	1,180	577		603	
(5)	Wheat	195	75		120	
(6)	Do. flour	220	25		195	
(7)	Others					
10	Hides and skins—					
(1)	Hides of cattle—					
(a)	Dressed or tanned	799	400		399	
(b)	Raw					
(2)	Hides of sheep and other animals—					
(a)	Dressed or tanned	98	84		14	
(b)	Raw	15	1		14	
11	Horns (Indian) and other skins, including pig.	44	180	136		
12	Jute—					
(1)	Raw	12,810	8,091		4,719	
(2)	Gunny-bags and cloth	2,414	779		1,635	
13	Leather—					
(1)	Unwrought	1	10	9		
(2)	Wrought, excepting boots and shoes					
14	Liquors—					
(1)	Alcohol and beer	23	19		4	
(2)	Spirits of all kinds, including country spirits					
(3)	Wine	42	36		6	
(4)	All other liquors, including toddy and fermented liquor, other than ale and beer					
15	Metals—					
(1)	Brass, unwrought	20	14		6	
(2)	Do., wrought	134	112		22	
(3)	Copper, unwrought	24	18		6	
(4)	Do., wrought	12	11		1	
(5)	Iron and steel—					
(a)	Cast	20	25	5		
(b)	Unwrought					
(c)	Wrought	980	700		280	
(d)	Manufactures	215	270	55		
(e)	Others	215	140		75	
16	Oil—					
(1)	Kerosene	15,000	4,774		10,226	
(2)	Castor	7	5		2	
(3)	Coconut	117	118	1		
(4)	Mustard and rape	285	263		22	
(5)	Others	215	40		175	
17	Others—					
(1)	Castor	23	21		2	
(2)	Barbitate					
(3)	Lime	1,000	617		383	
(4)	Poppy					
(5)	Starch and mustard	4,120	7,807	3,687		
(6)	Flax or jute	25	25			
(7)	Others	164	140		24	
18	Opium	7	2		5	
19	Paper and pasteboard	513	283		230	
20	Provisions—					
(1)	Dried fruits and nuts	1	13	12		
(2)	Others	44	23		21	
(3)	Others	1,155	1,305	150		



SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 24, 1902. 1877

No.	DESCRIPTION.	1901.	1902.	Increase in 1902.	Decrease in 1902.	EXPLANATIONS OF VARIATIONS BY TRAFFIC INDEPENDENT.
		Tons.	Tons.	Tons.	Tons.	
23	Railway Plant, Sec. for the Public and Foreign Locomotives— (1) Locomotives, engines and tenders and parts thereof (2) Carriages and trucks and parts thereof (3) Material— (a) Steel rails and fish-plates (b) Sleepers and keys of steel and cast iron (c) Other iron	41 4 151 1,514 151	— — 3 78 42	— — 125 1,141 129	— — — — —	
24	Salt	6,708	8,772	—	84	
25	Electricity and other motive substances— (1) Saltpetre (2) Other motive substances	— 181	— 129	— 22	— —	
26	Wool— (a) Foreign (b) Indian (c) Piece-goods— (1) Foreign (2) Indian	— — — — —	— — — — —	— — — — —	— — — — —	
27	Spices— (1) Betelnuts (2) Cardamoms (3) Chillies (4) Ginger (5) Pepper (6) Others	808 20 54 448 36 96	831 20 53 448 39 147	23 — — — — 51	— — — — — —	
28	Stones and lime	9,010	8,109	—	901	
29	Sugar— (1) Refined or crystallised, including sugar- candy (2) Unrefined— (a) Sugar (b) Gur, ras, jaggery, molasses, and other molasses products	830 418 1,248	801 448 1,251	29 — —	— — —	
30	Tan— (1) Foreign (2) Indian	— —	— —	— —	— —	
31	Tobacco— (1) Unmanufactured (2) Manufactured— (a) Cigars (b) Other sorts	8,548 — — —	8,548 — — —	— — — —	— — — —	
32	Wool— (1) Unrefined (2) Manufactured	1,455 128	822 101	633 27	— —	
33	Wool— (1) Raw (2) Manufactured— (a) Carpets and rugs (b) Piece-goods, European (c) Piece-goods, Indian (d) Other sorts of manufactures	701 — — — —	126 — — — —	— — — — —	— — — — —	
34	All other articles of merchandise	7,837	6,870	—	967	
	Total	110,337	11,250	99,087	9,287	

HAIPHONG DAB,  
for Examiner of Accounts, E. R. S. Railway.  
CALCUTTA, the 20th September 1902.

## Weekly Return of Traffic Receipts on Indian Railways

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B. E.-D., DACCA, AND ASSAM-BURAH SECTIONS.)

Approximate Return of Traffic and Mileage for the week ended 6th September 1902 on 661 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	118,100	Rs. 4,700 0 0	19,80,000	Rs. 8,00,000 0 0	Rs. 12,000 0 0	Rs. 4,12,000 0 0	87,400	30,000	1,17,400
Or per mile of railway	178 3/4	7 1/4	29,658 1/2	12,121 2/3	18 1/4	6,210 3/4	132 1/2	450 0/100	582 5/100
For previous 5 weeks of half-year	1,000,000	Rs. 37,000 0 0	15,00,000	Rs. 60,000 0 0	1,34,000 0 0	Rs. 35,41,000 0 0	850,000	280,000	1,130,000
Total for 10 weeks	1,118,100	Rs. 41,700 0 0	19,99,800	Rs. 8,08,000 0 0	1,46,000 0 0	Rs. 36,00,000 0 0	937,400	310,000	1,247,400
COMPARISON.									
Total for corresponding week of previous year	107,150	Rs. 3,300 0 0	11,00,000	Rs. 4,50,000 0 0	32,000 0 0	Rs. 3,65,000 0 0	87,000	28,000	1,15,000
Per mile of railway corresponding week of previous year	162	5 1/4	16,667	7,273 1/3	48 1/4	2,045 1/4	125 1/2	390 0/100	515 5/100
Total to corresponding date of previous year	1,000,000	Rs. 33,000 0 0	11,00,000	Rs. 4,50,000 0 0	32,000 0 0	Rs. 3,65,000 0 0	87,000	28,000	1,15,000

" Excluding ferry earnings.  
 (a) The increase is chiefly due to heavy jute traffic.

## BRAHMAPUTRA-SULTANPUR RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 6th September 1902 on 58.57 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	5,800	Rs. 1,700 0 0	33,170	Rs. 8,100 0 0	Rs. 20 0 0	Rs. 1,720 0 0	800	1,100	1,900
Or per mile of railway	115	29 1/4	565 1/2	137 1/3	3 1/2	29 1/4	132 1/2	190 0/100	322 5/100
For previous 5 weeks of half-year	50,000	Rs. 17,100 0 0	3,00,000	Rs. 8,000 0 0	200 0 0	Rs. 17,300 0 0	8,000	9,000	17,000
Total for 10 weeks	55,800	Rs. 18,800 0 0	3,33,170	Rs. 8,100 0 0	220 0 0	Rs. 19,020 0 0	8,800	10,100	18,900
COMPARISON.									
Total for corresponding week of previous year	5,157	Rs. 1,300 0 0	33,100	Rs. 8,000 0 0	31 0 0	Rs. 1,331 0 0	800	1,100	1,900
Per mile of railway corresponding week of previous year	87	22 1/4	565 1/2	137 1/3	5 1/4	22 1/4	132 1/2	190 0/100	322 5/100
Total to corresponding date of previous year	51,415	Rs. 16,800 0 0	3,33,100	Rs. 8,000 0 0	31 0 0	Rs. 16,831 0 0	8,000	9,000	17,000

## MYMENSINGH-JAGANNATHGANJ RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 6th September 1902 on 63.37 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	7,800	Rs. 2,000 0 0	33,000	Rs. 1,000 0 0	Rs. 20 0 0	Rs. 2,020 0 0	1,000	1,000	2,000
Or per mile of railway	123	31 1/2	520 1/2	157 1/3	3 1/4	31 1/2	157 1/3	157 1/3	314 6/100
For previous 5 weeks of half-year	60,000	Rs. 18,000 0 0	1,47,000	Rs. 1,000 0 0	200 0 0	Rs. 18,200 0 0	10,000	10,000	20,000
Total for 10 weeks	67,800	Rs. 20,000 0 0	1,80,000	Rs. 1,000 0 0	220 0 0	Rs. 20,220 0 0	11,000	11,000	22,000
COMPARISON.									
Total for corresponding week of previous year	7,800	Rs. 1,700 0 0	33,000	Rs. 800 0 0	20 0 0	Rs. 1,720 0 0	1,000	1,000	2,000
Or per mile of railway corresponding week of previous year	123	26 1/2	520 1/2	126 1/3	3 1/4	26 1/2	157 1/3	157 1/3	314 6/100
Total to corresponding date of previous year	60,000	Rs. 18,000 0 0	1,47,000	Rs. 800 0 0	200 0 0	Rs. 18,200 0 0	10,000	10,000	20,000

## DACCA STATE RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 6th September 1902 on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Traffic for the week	80,800	Rs. 1,146 0 0	Mts. 31,348 0	Rs. 1,036 0 0	Rs. 110 0 0	Rs. 10,380 0 0	2,723	1,526	4,249
per mile of railway	848	13 6 0	364 0	12 0 0	1 0 0	127 0 0	...	...	...
previous 5 weeks of half-year	288,000	63,306 0 0	2,15,900 0	17,380 0 0	1,916 0 0	65,350 0 0	14,360	12,438	26,798
Total for 10 weeks	368,800	74,452 0 0	2,47,248 0	18,416 0 0	2,026 0 0	85,730 0 0	17,083	13,964	31,047
COMPARISON.									
for corresponding week previous year	76,216	7,842 0 0	26,826 0	4,401 0 0	84 0 0	12,997 0 0	1,875	1,097	2,972
per mile of railway	895	91 0 0	310 0	51 0 0	1 0 0	153 0 0	...	...	...
for corresponding week of previous year	240,472	49,314 0 0	3,26,428 0	29,807 0 0	3,361 0 0	1,04,858 0 0	25,481	16,517	41,998

## COOCH BEHAR STATE RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 6th September 1902 on 33.78 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Traffic for the week	1,440	Rs. 798 0 0	Mts. 9,334 0	Rs. 1,370 0 0	Rs. 40 0 0	Rs. 2,058 0 0	290	1,061	1,351
per mile of railway	78	23 6 0	273 0	40 0 0	1 0 0	61 0 0	...	...	...
previous 5 weeks of half-year	13,050	7,740 0 0	60,040 0	8,510 0 0	140 0 0	16,610 0 0	2,406	17,843	20,249
Total for 10 weeks	26,890	15,480 0 0	119,080 0	17,820 0 0	280 0 0	33,490 0 0	2,696	18,904	21,600
COMPARISON.									
for corresponding week previous year	1,950	427 0 0	6,770 0	1,166 0 0	113 0 0	1,696 0 0	351	536	887
per mile of railway	58	12 6 0	200 0	34 0 0	...	50 0 0	...	...	...
for corresponding week of previous year	19,090	7,319 0 0	70,270 0	7,350 0 0	1,371 0 0	16,030 0 0	2,375	6,571	8,946

\*Ballast train-miles, 1,900.

## BENGAL AND NORTH-WESTERN RAILWAY.

Approximate Return of Traffic for the week ending 6th September 1902 on 1,201 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated) including steam-turbine.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Traffic for the week on all lines open	174,470	Rs. (a) 1,03,180	Mts. 4,88,850	Rs. (b) 54,790	Rs. 11,400	Rs. (c) 1,25,280	40,478	(d) 21,235	71,713
per mile of railway	145.28	85.82	4,068.65	45.62	9.48	104.22	...	...	...
previous 5 weeks of half-year	1,840,150	5,41,650	47,06,800	5,56,280	1,41,170	15,17,420	2,67,446	972,443	1,239,889
Total for 10 weeks	1,814,620	7,06,830	48,85,650	5,86,100	1,42,570	16,44,740	2,67,924	993,678	1,261,602
COMPARISON.									
for corresponding week of previous year on 1,351 miles open	154,711	55,026	3,58,790	40,434	10,366	1,07,417	36,626	(d) 21,461	58,087
per mile of railway	110.77	40.72	2,654.11	29.92	7.74	79.46	...	...	...
for corresponding week of previous year	1,354,700	4,78,000	36,03,212	4,07,840	1,00,280	16,45,644	2,22,000	853,248	1,075,248

(a) Increase due to improved traffic.

(b) Out of the increase of Rs. 14,116, Rs. 8,046 are due to railway material and ballast trains, the remainder occurred in public traffic.

(c) Includes 6,000 miles of ballast trains run on open line.

(d) " 5,730

## ASSAM-BENGAL RAILWAY.

Approximate Return of Traffic for the week ended 6th September 1902 on 538 miles open for all descriptions of traffic, and on additional 31 miles for goods and parcels traffic only.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRADING EXPENDITURE.		
	No. of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	87,677	Rs. 10,745 0 0	Mds. 1,41,718 0	Rs. 1,32,779 0 0	Rs. 1,035 0 0	Rs. 24,362 0 0	5,892	5,398	11,290
Or per mile of railway	162 00	20 01	263 20	24 73	1 12	45 01	10 76	10 04	20 80
For previous 4 weeks of half-year	343,340	1,42,930 0 0	14,04,404 0	1,31,537 0 0	12,227 0 0	5,47,823 0 0	65,411	60,079	1,25,490
Total for 10 weeks	431,017	1,53,670 0 0	15,46,118 0	1,43,816 0 0	13,262 0 0	5,53,174 0 0	71,303	65,477	1,36,780
COMPARISON.									
Total for corresponding week of previous year	80,028	Rs. 12,112 0 0	Mds. 1,30,081 0	Rs. 17,304 0 0	Rs. 650 0 0	Rs. 30,045 0 0	5,320	5,501	10,821
Or per mile of railway	150 00	22 45	240 81	32 02	1 12	55 74	10 04	10 31	20 35
Total for corresponding date of previous year	3,04,524	1,40,500 0 0	14,08,390 0	1,65,676 0 0	13,194 0 0	5,30,876 0 0	64,354	50,623	1,14,977

## FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Assam-Bengal Railway.

RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1902.			RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1901.			TOTAL RECEIPTS FROM 1ST APRIL 1901 TO 6TH SEPTEMBER 1902.			TOTAL RECEIPTS FROM 1ST APRIL 1901 TO 6TH SEPTEMBER 1901.			Total increase in 1902.	Total decrease in 1901.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Rs.	Ms.
160	Rs. 24,362	Rs. 152 00	178	Rs. 31,054	Rs. 174 45	338	Rs. 7,77,146	Rs. 22 99	375	Rs. 8,50,176	Rs. 22 69	Rs. 72,030	Ms. 71,030

## SEGOWLIE-RAKSALU BRANCH RAILWAY.

(WORKED BY THE B. & N.-W. RAILWAY.)

Approximate Return of Traffic for the week ending 13th September 1902 on 16 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRADING EXPENDITURE.		
	Passengers carried.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 16 miles open	1,798	Rs. 205	Mds. 4,080	Rs. 580	Rs. 5	Rs. 790	444	304	748
Or per mile of railway	112 38	12 81	255 00	36 25	0 31	49 38	27 75	19 00	46 75
For previous 4 weeks of half-year	13,602	1,784	27,864	2,117	67	3,968	5,333	218	5,551
Total for 10 weeks	15,400	1,989	31,944	2,697	72	4,758	5,777	512	6,289
COMPARISON.									
Total for corresponding week of previous year on 16 miles open	1,001	Rs. 401	Mds. 6,802	Rs. 110	Rs. 13	Rs. 524	442	80	522
Or per mile of corresponding week of previous year	62 56	25 06	425 12	6 87	0 81	32 75	27 62	5 00	32 62
Total for corresponding date of previous year	30,475	3,580	79,333	2,518	114	6,212	4,515	593	5,108

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., E.-D., DACCA AND ASSAM-BRASS SECTIONS.)

Approximate Return of Traffic and Mileage for the week ended 13th September 1902 on 541 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including levy).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	222,880	97,299 0 0	1,175,830 0	9,87,119 0 0	12,200 0 0	8,70,539 0 0	87,003	47,007	134,010
Or per mile of railway	406	179 0 0	2,156 0	18,213 0 0	22 0 0	16,000 0 0	1,600	870	2,470
For previous 10 weeks of half-year	2,114,680	9,23,060 0 0	9,581,180 0	18,95,050 0 0	1,47,640 0 0	54,00,130 0 0	897,003	370,407	1,267,410
Total for 11 weeks	2,337,560	10,20,359 0 0	10,756,990 0	21,35,069 0 0	1,59,840 0 0	33,12,740 0 0	1,004,006	447,414	1,451,420
COMPARISON.									
Total for corresponding week of previous year	215,027	88,116 0 0	1,070,308 0	2,27,347 0 0	11,100 0 0	3,21,489 0 0	37,516	47,101	84,617
Or per mile of railway	395	160 0 0	1,950 0	206 0 0	20 0 0	604 0 0	700	870	1,570
For previous 10 weeks of half-year	2,039,553	9,20,841 0 0	10,650,322 0	19,91,028 0 0	1,47,640 0 0	32,05,363 0 0	869,490	447,414	1,316,904

\* Including ferry earnings.  
Increase under goods is due to the heavy Jute traffic.

## BRAHMAPUTRA-SULTANPUR RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 13th September 1902 on 64'37 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including levy).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	6,440	1,840 0 0	33,290 0	4,000 0 0	50 0 0	5,210 0 0	104	1,108	1,212
Or per mile of railway	108	28 0 0	516 0	62 0 0	1 0 0	80 0 0	1,600	1,700	3,300
For previous 10 weeks of half-year	63,800	18,740 0 0	283,150 0	34,780 0 0	460 0 0	40,080 0 0	10,104	10,474	20,578
Total for 11 weeks	70,240	20,580 0 0	316,440 0	38,780 0 0	510 0 0	50,090 0 0	11,148	11,582	22,730
COMPARISON.									
Total for corresponding week of previous year	5,211	1,460 0 0	10,710 0	1,594 0 0	26 0 0	3,321 0 0	985	725	1,710
Or per mile of railway	80	22 0 0	164 0	24 0 0	0 0 0	52 0 0	1,400	1,100	2,500
For previous 10 weeks of half-year	50,000	18,280 0 0	277,650 0	33,004 0 0	250 0 0	40,484 0 0	9,420	12,074	21,494

## MYMENSINGH-JAGANNATHGANJ RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 13th September 1902 on 33'87 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including levy).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	6,420	1,230 0 0	43,640 0	1,730 0 0	50 0 0	4,040 0 0	1,279	908	2,187
Or per mile of railway	190	36 0 0	1,288 0	51 0 0	1 0 0	120 0 0	3,800	2,700	6,500
For previous 10 weeks of half-year	77,210	22,000 0 0	200,480 0	8,860 0 0	970 0 0	30,000 0 0	11,713	3,258	14,971
Total for 11 weeks	83,630	23,230 0 0	244,120 0	10,590 0 0	1,020 0 0	34,090 0 0	13,002	3,166	16,168
COMPARISON.									
Total for corresponding week of previous year	6,147	1,580 0 0	11,905 0	564 0 0	34 0 0	2,168 0 0	977	437	1,414
Or per mile of railway	182	46 0 0	352 0	17 0 0	1 0 0	64 0 0	2,800	1,300	4,100
For previous 10 weeks of half-year	60,940	20,205 0 0	171,477 0	6,677 0 0	300 0 0	27,775 0 0	11,925	2,438	14,363

## DACCA STATE RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 13th September 1902 on 88 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RT.		
	Number of passengers.	Coachings receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	22,271	Rs. 4,200 0 0	Mt. 24,850 0	Rs. 2,980 0 0	Rs. 50 0 0	Rs. 5,540 0 0	2,790	1,218	4,008
Or per mile of railway ...	251	48 0 0	280 0	34 0 0	1 0 0	63 0 0	32	14	46
For previous 10 weeks of half-year ...	204,800	78,440 0 0	1,47,830 0	18,850 0 0	2,080 0 0	1,06,310 0 0	27,760	15,177	42,937
Total for 11 weeks ...	227,071	82,640 0 0	1,72,680 0	21,830 0 0	2,030 0 0	1,08,340 0 0	30,550	16,395	46,945
COMPARISON.									
Total for corresponding week of previous year ...	20,280	Rs. 3,573 0 0	Mt. 20,055 0	Rs. 4,043 0 0	Rs. 80 0 0	Rs. 7,696 0 0	2,840	1,204	4,044
For mile of railway corresponding week of previous year ...	230	78 0 0	270 0	47 0 0	1 0 0	80 0 0	32	14	46
Total to corresponding date of previous year ...	270,333	79,617 0 0	1,54,653 0	18,870 0 0	5,380 0 0	1,18,870 0 0	31,430	15,030	46,460

## COOCH BEHAR STATE RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 13th September 1902 on 35.6 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RT.		
	Number of passengers.	Coachings receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	2,350	Rs. 780 0 0	Mt. 8,750 0	Rs. 940 0 0	Rs. 20 0 0	Rs. 1,740 0 0	285	1,320	1,605
Or per mile of railway ...	66	22 0 0	246 0	26 0 0	1 0 0	49 0 0	10	37	47
For previous 10 weeks of half-year ...	20,420	8,480 0 0	78,000 0	9,780 0 0	200 0 0	18,460 0 0	2,741	12,923	15,664
Total for 11 weeks ...	22,770	9,260 0 0	86,750 0	10,720 0 0	220 0 0	20,170 0 0	3,026	14,243	17,269
COMPARISON.									
Total for corresponding week of previous year ...	1,500	Rs. 504 0 0	Mt. 7,300 0	Rs. 1,185 0 0	Rs. 111 0 0	Rs. 1,690 0 0	248	850	1,098
For mile of railway corresponding week of previous year ...	42	14 0 0	204 0	33 0 0	3 0 0	47 0 0	10	24	34
Total to corresponding date of previous year ...	21,400	7,873 0 0	78,830 0	9,174 0 0	1,801 0 0	13,858 0 0	2,830	12,301	15,131

\* Corrected as per revised statement submitted by Engineer-in-Chief.  
 † Includes Ballast train-mile 2,000.

## BENGAL AND NORTH-WESTERN RAILWAY.

Approximate Return of Traffic for the week ending 13th September 1902 on 1,261 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-train.	Total earnings.	TRAFFIC TRAIN-MILES RT.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 1,261 miles open ...	164,750	Rs. 51,430 0 0	Mt. 4,65,516 0	Rs. 66,360 0 0	Rs. 14,315 0 0	Rs. (a) 1,32,405 0 0	41,216	(b) 21,915	63,131
Or per mile of railway ...	130 65	40 80	369 40	52 60	11 30	105 60	33	19	52
For previous 10 weeks of half-year ...	1,814,850	7,00,870 0 0	68,85,880 0	1,20,100 0 0	1,82,870 0 0	14,46,740 0 0	257,831	1,00,801	358,632
Total for 11 weeks ...	1,979,600	7,52,300 0 0	73,51,400 0	1,26,460 0 0	1,97,185 0 0	15,79,480 0 0	299,047	1,22,716	421,763
COMPARISON.									
Total for corresponding week of previous year ...	159,418	Rs. 44,837 0 0	Mt. 3,13,000 0	Rs. 60,172 0 0	Rs. 10,370 0 0	Rs. 1,15,379 0 0	36,563	(c) 24,123	60,686
For mile of corresponding week of previous year ...	126 47	35 60	248 0	46 0 0	8 30	91 60	29	19	48
Total to corresponding date of previous year ...	1,908,816	7,20,570 0 0	70,76,340 0	1,24,821 0 0	1,78,807 0 0	15,53,923 0 0	274,914	1,07,740	382,654

(a) Increase due to improved traffic. Under goods the increase is mainly due to Rs. 7,100 on account of railway material and ballast traffic.  
 (b) Includes 7.1% rates of Ballast traffic run on open lines.  
 (c) 5,504

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

		Rs.	A.	P.	Rs.	A.	P.
Approximate earnings for the week ending 13th Sept. 1902 ...	<div> Coaching ... 4,017 0 0  Goods ... 10,772 0 0  Other earnings ... 66 0 0 </div>				14,855	0	0
Audited earnings for the corresponding period of 1901 ...	<div> Coaching ... 7,840 0 0  Goods ... 6,714 0 0  Other earnings ... 44 0 0 </div>				14,602	0	0
	Increase				253	0	0
Receipts per mile for the week ending 13th Sept. 1902 ...					291	4	8
Ditto for the corresponding period of 1901 ...					285	8	8
	Increase				6	11	11
Receipts from 1st July to 13th Sept. 1902 ...					1,45,917	0	0
Ditto for the corresponding period of 1901 ...					1,62,533	0	0
	Decrease				6,616	0	0



SUPPLEMENT TO  
The Calcutta Gazette.

WEDNESDAY, SEPTEMBER 17, 1902.

OFFICIAL PAPERS.

[Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of five rupees per annum if delivered in Calcutta, or seven rupees and eight annas if sent by post.]

CONTENTS.

	Page		Page
RESOLUTION on the Annual Report of the Archaeological Survey, Bengal Circle, for the year ending with April 1902, and the Report	1291	TABLE of Rainfall recorded at stations in Bengal in August 1902	1296
Extract from the Report on the Administration of the Salt Department during the year 1901-1902	1308	Vital Statistics of Districts and Towns in Bengal for the month of July 1902	1316
Weather and Crop Report for the week ending the 16th September 1902	1329	Area leased for Irrigation up to end of July 1902	1340
Metereological Report of the Province of Bengal for the month of August 1902	1338	Circular and Eastern Canal for the week ending Saturday the 13th September 1902	1346
		Results of the Meteorological Observations taken at the Allpore Observatory from 24th to 18th September 1902	1348
		Weekly Receipts and Traffic Statistics on Indian Railways	1351

RESOLUTION ON THE ANNUAL REPORT OF THE ARCHAEOLOGICAL SURVEY, BENGAL CIRCLE, FOR THE YEAR ENDING WITH APRIL 1902, AND THE REPORT.

GENERAL DEPARTMENT—MISCELLANEOUS.

Calcutta, the 9th September 1902.

RESOLUTION—No. 2915.

READ—

The Annual Report of the Archaeological Survey, Bengal Circle, for the year ending with April 1902.

The Second Annual Report of the Archaeological Survey Department, Bengal Circle, has been submitted by Dr. Bloch, the Archaeological Surveyor, who has been in charge of the Department since its constitution in April 1900. During the first year of his appointment the Archaeological Surveyor visited the Puri, Cuttack, Marshidabad, Sonthal Parganas, Malda, and Dinajpur districts, spending about 60 days on tour. During the year under report he spent 145 days on tour in the districts of Champaran, Muzaffarpur, Gaya, Patna, Shahabad, Birbhum, Hooghly, Puri, Khulna, Dacca, and Mymensingh. The object of these tours of general inspection has been to ascertain what localities from their antiquarian interests are deserving of detailed and systematic exploration, and what antiquities should be preserved. Dr. Bloch has recently submitted programmes for future work; and the Lieutenant-Governor has decided that the



Buddhistic antiquities in the Bihar districts and especially the exploration of the site of the ancient Vaishali in Muzaffarpur district deserve first attention.

2. Dr. Bloch gave special attention during the year to the antiquities in the districts of Champaran, Patna, Gaya, and Shahabad. The most important remains in the district of Champaran are the three Asoka pillars, viz., the Rampurwa pillar and the two Lauriya pillars at the villages of Nandagarh and Araraj. In accordance with Dr. Bloch's recommendation, an estimate of the cost of replacing in position the Rampurwa pillar has been called for from the Superintending Engineer. The Lieutenant-Governor hears with regret of the vandal scribbling of names on the two Lauriya pillars, and desires that the district authorities will protect monuments from such acts so far as is possible.

The suggestion that the ancient rock-cut caves on the Barabar and Nagarjuni Hills should be protected from intrusion of *jogis* and *sadhus* must be considered by the Magistrate of Gaya, as also the proposal for the removal to the Indian Museum of the Buddhistic statues that are lying uncared for in the village of Bishenpur, in the district of Gaya.

The hill fort of Shergarh, an important relic of Sher Shah, in the district of Shahabad, is reported to be uncared for and overgrown with jungle. The local Public Works officer will be requested to make arrangements for the better protection of this interesting building. The Temple of Mandesvari and the tomb of Bakhtiyar Khan in this district are also worth preserving. A separate report on these monuments has been received from Dr. Bloch, and estimates for repairs have been called for from the Executive Engineer, Arrah Division.

Repairs of the Bhubaneswar and Kanarak Temples in the district of Puri are going on, and Dr. Bloch's recommendation regarding the cleaning of the carvings in some of the temples may be commended by the District Magistrate to the authorities in charge of these temples.

The Archaeological Surveyor has submitted a separate report on the remains at Tribeni and Pandua, in the district of Hooghly, and has suggested certain petty repairs, which will be taken up when funds are available.

3. The total expenditure incurred last year on the repairs of ancient monuments amounted to Rs. 29,679, out of which a sum of Rs. 15,846 was expended on the repairs of the ruins at Gaj and Pandua, in the district of Malda, and Rs. 12,778 was spent on the repairs of the temples in the district of Puri; the gateway of the Juma Masjid near Rajmahal was also repaired, and wire netting was placed over the openings in Hasan Khan Sur's tomb and Sher Shah's tomb at Sasaram.

4. The "List of Ancient Monuments in Bengal" was prepared and published by the Public Works Department in 1895. To bring the work up to date and to correct inaccuracies and supply omissions, it has been decided to publish a revised edition. At the suggestion of the Director-General of Archaeology, the work of revision has been entrusted to the Archaeological Surveyor.

5. The Lieutenant-Governor thanks Dr. Bloch for his very interesting report.

By order of the Lieutenant-Governor of Bengal,

W. C. MACPHERSON,  
Offg. Secretary to the Govt. of Bengal.

(No limit has been fixed as to the number of pages).

# ANNUAL REPORT OF THE ARCHÆOLOGICAL SURVEY, BENGAL CIRCLE

For the year ending with April 1902.

## PART I.—GENERAL REMARKS.

1. *Constitution of the Department.*—The non-gazetted staff of the Department remained as it stood at the time of my last report, up to the 13th March 1902, when the Pandit of the Survey, Babu P. C. Mukherji, joined the office of the Director-General of Archaeology in the capacity of a draftsman. The vacancy thus created has not yet been filled up, and a proposal for doing so will be soon submitted. It appears to me most essential to engage the services of a good photographer, as neither I nor my draftsman are able to take photographs, and I shall propose accordingly.

2. *Tours of the Archaeological Surveyor.*—I have been on tour from the 6th November 1901 to the 7th April 1902, that is, altogether 145 days, not counting two short interruptions in February and March, when I returned to Calcutta. My original programme included a visit to the Patna Division, Assam, and Dacca. I had, however, to postpone my visit to Assam until next year, as on my return from Bihar the season was already too far advanced to complete this journey. Instead of this I added some shorter tours to my programme, which I could still conveniently undertake. Having received information about the excavation having begun around the Black Pagoda at Kanarak in district Puri, I went down there on the 20th February 1902, in order to see how the work was done, and if necessary, to offer any suggestions to the Engineer in charge. I also took this opportunity to inspect the work, which is now in progress at Bhubaneswar and Khandagiri in the same district. At all these places, I was accompanied by Rai Prasanna Kumar Pal Bahadur, the Honorary Assistant Engineer in charge of the work. The results of my observations will be detailed in Part II of this Report. On my way to Dacca, I visited Khulna, in order to see the important remains at Bagerhat, viz., the tomb of Khanja Ali, as he is locally called, and the big mosque with 77 domes, called Sat Gumbaz, close to his tomb. Finally, I was ordered to inspect the remains at Atia in the Tangail subdivision of the district of Mymensingh, about which some information had been submitted to Government through the Collector of Mymensingh. I visited this place after the completion of my tour in Dacca district, and I have submitted a special report on the remains there in my letter No. 37, dated the 29th April 1902. I was also ordered to inspect the Siva temples at Bakreswar in the Birbhum district, and the tomb of Zafar Khan Ghazi at Triveni and the mosque and minar at Pandua, both in the Hooghly district. I did this on my way back from the Patna Division, and I have submitted special reports on these remains in my letters Nos. 13 and 16, dated the 18th and 19th February 1902, respectively.

My journeys during the last touring season thus include the following districts: Champaran, Muzaffarpur, Patna, Shahabad, Gaya, Birbhum, Hooghly, Puri, Khulna, Dacca, and Mymensingh. Their results will be detailed in Part II of this Report. The principal object of these preliminary inspection tours was to inspect as many ancient remains as possible, in order to ascertain what is really worth preserving, and also which places or areas should be surveyed in a more detailed and systematic way.

With regard to the latter point, I have submitted certain proposals in my letter No. 38, dated the 29th April 1902. I consider it essential that good photographs, plans, and drawings should be prepared of some of the more important groups of monuments in this province. Very little has been done in this direction, and scarcely anything has been published. It seems, however,

advisable to me to undertake such works always with a view to publication; otherwise, money and labour spent on them will be almost lost to those who take an interest in archaeology. Conservation, it is true, is the primary object of the present survey; but as owing to the liberality of the Local Government during the last years, the most important monuments in Bengal are now in a fair state of repairs, time appears to have come to make some of them better known to the general public interested in them by means of *facsimile* reproductions of good photographs and drawings accompanied by the necessary explanatory text, as has been done with regard to other important ancient remains in India.

3. *Tours of Babu P. C. Mukherji.*—Up to the Puja holidays, the Babu travelled in the districts of Champaran, Darbhanga, Gaya, Shahabad, and Patna, where he inspected and reported on a number of ancient nonuments, and from where he brought down impressions of a good many inscriptions. He then visited several places in the Bhagalpur district, the Burdwan Division, and the district of Balasore, until, on the 18th March 1902, he joined his new appointment as draftsman to the Director-General of Archaeology. The results of his journeys have been submitted to me in several preliminary reports at the end of each month as well as in a general report, and they will be found detailed in Part III of this Report. As regards inscriptions, the discovery of one important new document is due to him. He found it inside the Gadadhar temple at Gaya, but, unfortunately, the greater portion of it is now covered by a statue of Vishnu in the sanctum of the temple, and his attempts to get permission from the owner of the temple to remove the statue in order to take an impression of the inscription have not met with success. He thus was able to copy only the beginning. As the inscription opens with an invocation to the Sun God, it is probable that it records the erection of a temple of that deity; it is certainly not *in situ* at present. The next two verses are found also in another, hitherto, unpublished Gaya inscription, which also escaped the notice of the Babu. It is now inside a small shrine in the compound of the Vishnupad temple. It refers to the time of Nayapala, tenth century A.D., and mentions the names of three persons, father, son, and grandson, *viz.*, Paritosha, Sudraka, and Visvarupa, who are known to us already from an inscription in the Krishna Dvarika temple at Gaya. The inscription, discovered by Babu P. C. Mukherji, only contains the first name, Paritosha, but it is almost certain that in the portion now covered by the Vishnu statue the two other names follow, and that it belongs to the same period.

4. *Preservation of ancient Monuments.*—Apart from repairs which are going on since previous years, such as the repairs to the temples at Bhubaneswar in the district of Puri, and to the Muhammadan remains at Gaur and Panduah in the district of Malda, or from other repairs which have been sanctioned at the motion of the local Engineers in charge of those buildings, and of which intimation has reached me from time to time, such as the closing by wire-netting of the doors and windows of the tombs of Sher Shah and his father at Saesaram in the district of Shahabad, and certain repairs to the palace at Rohtasgarh in the same district,—apart from those, I have submitted proposals with regard to the preservation of the following ancient monuments:—

(a) Certain minor repairs to the great Siva temple at Bakreswar in the district of Birbhum. I have, later on, received a communication intimating that the local *Sabais* of the place will provide for the cost of these repairs.

(b) Repairs to the minar and mosque at Panduah, and to the tomb of Zafar Khan Ghazi and the mosque at Triveni, both in the district of Hooghly. My proposal principally concerns the minar at Panduah, which, though not of any great artistic value, seems to me well worthy of preservation on account its being quite unique in this province. It is evidently an imitation of the Qutab Minar at Delhi. Its fifth storey and top piece have broken down, and I have proposed to re-build these portions, which may be easily done with the help of a lithograph published in 1871 by the late Mr. Blochmann, on which the entire structure is still seen. With regard to the other buildings, I have thought it sufficient if only such preventive measures are taken as may preserve those portions of them which are still standing from complete destruction.

(c) Repairs to the broken Asoka column near Pipariya, in the district of Champaran, commonly called the Rampurwa Asoka pillar. It will be

necessary to remove the larger portion of the pillar, now lying in the open field for a distance of some 800 or 1,000 feet to the south, to its original site, where its broken base is still standing, and to put it up there in its original position. I again beg to emphasize the necessity of these repairs owing to the high antiquity and great importance of this monument, and I shall deem it a special favour if the Local Government may see its way to provide the necessary funds for these probably comparatively expensive repairs.

The following proposals have not yet been submitted to Government, but will be so before I go on privilege leave in the beginning of July :—

(d) Repairs to the tomb of Bakhtiyar Khan, near Chainpur, in the Bhabuah subdivision of the district of Shahabad. It is almost a copy of the tomb of Hasan Khan Sur, the father of Sher Shah, at Sasaram, evidently of the same time. But it is a very fine specimen of its kind, and now in such a condition as to make repairs urgently required, if the monument is not to be allowed to tumble into pieces. A separate report will be submitted shortly.

(e) Repairs to the tomb of the Bengal Sultan Ghiyasuddin Azam Shah, near Mograpara, the site of Sonargaon, the ancient capital of Eastern Bengal, in the Narainganj subdivision of the district of Dacca. It is a plain basalt sarcophagus, resting on a basalt platform. No inscription is found on it, and only tradition points to it as the burial place of this king, who is best known on account of his literary correspondence with the famous Persian poet Hafiz. What will be required to do to it, is merely to raise the platform and the sarcophagus, which have now sunk, and the stones of which have become dislocated. This probably can be done without any great outlay of money. I shall also propose to add a suitable inscribed tablet to it, saying that this tomb is traditionally pointed out as the resting-place of Ghiyasuddin Azam Shah. Similar tablets are now erected at various places of historical interest all over India. A special report will be submitted later on.

5. *Photographs, drawings, and inscriptions.*—As I have already remarked in paragraph 1 of this report, no photographer has been employed by me, and consequently I have not been able to take any photographs of the monuments inspected by me. I intend, however, making provision for this before I start on my next journey. As to drawings, my stay at the places visited by me generally was limited to a short time only. In order to procure good drawings it is necessary to provide for a prolonged stay of several days at each place, in cases even for several weeks. It will even sometimes become necessary to make special preparations, such as scaffolding, wherever the building to be sketched is very high, in order to take the necessary measurements. I do not think that drawings based on mere rough sketches, such as I might have procured during my last journey, are of any value, and it is for this reason that I have not brought back any drawings to speak of. Of inscriptions I have copied and read a great number, partly on the spot from the original stone, partly from impressions on paper. I have already in paragraph 3 of this report referred to the discovery of two new inscriptions at Gaya of the 10th century A. D. I also took an impression of the unpublished Sanskrit inscription at the Akshaya-vata at Gaya, which is of the same time, and of another small but valuable inscription in Sanskrit at the Prapita-Mahesvara temple close to it. Its date corresponds to Thursday, the 1st May 1242 A.D. As I shall show later on in Part II, these inscriptions are of special interest for the local history of the sacred tirthas of Gaya, helping us to put back their date to a period far anterior to the time when the present temples were erected, which, as I need scarcely remark, are all of comparatively recent age. Some of the many votive inscriptions on Buddhistic images in the districts of Gaya and Patna are also of some interest on account of the names which they preserve. In Dacca, I found on a loose slab an apparently new inscription in Persian poetry mentioning a king Ruknuddin, who is evidently the Bengal Sultan Ruknuddin Barbak Shah (1459—1474 A.D.). It is the first instance of an inscription of a Bengal Sultan composed entirely in Persian poetry. I think that for the first time I have succeeded in deciphering the inscription of the time of Sher Shah on the dargah of Shah Juman Madari at Hilsa, near Bihar, and of the short inscription over the prayer niche of the tomb of Sher Shah's father at Sasaram. I regret

that I was unable to procure an accurate copy of the inscription over the central arch of the Alamgiri Masjid at Rohtasgarh. It is written in very small characters, and put up in a position very high up, so as to make it impossible to read it while standing down below. But from what I could make out, it is evidently a record of Sher Shah's time, thus helping us to fix the accurate date of this Mosque, which local tradition ascribes to the time of Alamgir. Another, evidently unpublished, inscription of the time of Shah Jahan was found over the door to a tomb at the foot of Rohtasgarh hill. It is of some interest, as it mentions the several parganas forming the jagirs of the then Qiladar and Darogah of the fort. A great many new inscriptions of the Moghul time also have been copied; their principal value consists in enabling us to determine the accurate date of the buildings to which they are attached. I shall refer to these inscriptions in connection with my notes on the places where they are found in Part II of this report, and I do not, for this reason, consider it necessary to add to this report a list of all the inscriptions of which copies have been taken.

6. *Sculptures and statues.*—In two of the districts visited by me, *viz.*, Gaya and Patna, a great many ancient statues are found scattered all over the country. Generally, they are now put up in modern temples and worshipped as something quite different, of course, than what they originally were meant to represent. But many of them are still lying loose, and there is scarcely a single village where not at least some fragments of ancient statuary are collected under the village pipal tree. These statues generally belong to the time of the Pala kings, who ruled over Bihar and portions of Western Bengal from 800 to 1200 A.D. They are both Buddhistic and Brahmanical, and they afford a very graphic illustration of the connection between these two rival sects, which seems to have developed more and more towards a gradual intermixture of both, the result being that Buddhism became more and more Hinduized. As an instance of this, I may quote the statue of Karttikayini, the female energy of the war god, inscribed with the Buddhist creed. I found this curious image at Dharawat, in the district of Gaya.

The Buddhistic images are of special interest. With the exception of the Græco-Buddhistic sculptures from Gandhara, found all along the North-Western frontier of India, they are the only class of Indian Buddhistic art, which has come down to us with a fair amount of completeness. The Indian Museum in Calcutta is the only institution which possesses a good collection of this particular branch of Buddhistic art, and it is a matter of great regret that many rare specimens, which would greatly add to the value of this collection, are at present put up in local shrines, and thus have become objects of religious worship, so as to make it impossible to remove them to this institution, where not only they would be better cared for than at their present places, but also serve a more useful purpose in the interest of archaeology, than they now do. I have, however, noticed a few valuable specimens, now lying uncared for, which it will be possible to procure for the Indian Museum, and I shall later on submit a special report with regard to this point.

7. *Concluding remarks.*—The staff of this Department has worked to my entire satisfaction. Babu P. C. Mukerji has shown great zeal in completing the tours which he was ordered to undertake, for a great part of the year under trying circumstances. My draftsman, Babu Haridas Dutta, has been of great use to me in copying inscriptions, for which he is particularly skilled. For reasons above stated, I am not able to submit any specimens of his drawings; but drawings of his, previously submitted, have met with great approval. My clerk, Babu Krishna Chandra Mozumdar, was left in sole charge of my office during my absence on tour, and he has given me much satisfaction by the great care with which he discharged his duties.

#### PART II.—NOTES ON ANCIENT MONUMENTS VISITED BY THE ARCHÆOLOGICAL SURVEYOR.

##### A.—DISTRICT CHAMPARAN.

8. *General remarks.*—The following is a list of ancient remains in the district of Champaran, inspected by me:—

The three Asoka pillars, *viz.*, the two Lauriya pillars, one near Thana Gobindganj and the other fifteen miles north of Bettiah, and the broken

pillar near village Pipariya, Thana Shikarpur, in the Bettiah subdivision. The last is commonly known as the Rampurwa pillar, while the others are called, respectively, the Lauriya-Araraj and Lauriya-Navandgarh, or Radhia and Mathia pillars. The last two names are misnomers, they having been chosen, as it appears, by Mr. Hodgson's Pandit in order to avoid the obscene-sounding name Lauriya;

The ancient Buddhist stupa, two miles south-west of Thana Kesariya;

Another mound, evidently the ruins of a Buddhist stupa, called Sagardih, on the road from Pipra to Kesariya;

The earthen barrows, probably sepulchral mounds, close to the second Lauriya pillar, fifteen miles north of Bettiah;

The Nandangarh, wrongly called Navandgarh, close to the same place;

The Chankigarh, three miles west of Thana Shikarpur;

Ancient fort and modern temples at Simraop, in Nepalese territory, five miles from Purnahia factory;

The Nonachaur-ka-garh, five miles east of Motihari;

Fort and temples at Sitakund and Bediban, close to Pipra railway station.

I shall deal with them in the order of this list.

9. *The Asoka pillars.*—These pillars, together with another one near Bakhra, in the district of Muzaffarpur, which will be mentioned later on, mark the stages of the journey to Nepal, which Asoka undertook in the 31st year of his reign in order to visit some of the holy sites of Buddhism. In the 27th year of his reign he ordered six religious edicts to be engraved on them. These edicts are not on the Bakhra pillar, but from its general style, as also for other reasons, there can be no doubt as to its origin. Of the three Champaran pillars, that at Lauriya-Nandangarh, fifteen miles north of Bettiah, is best preserved. With the exception of some injuries to the jaw of the lion on its capital, evidently the effect of a cannon shot, the mark of which may still be seen on the northern face of the pillar, it is still almost perfect. I think General Cunningham is right in attributing this damage to some zealous followers of the army of Mir Jumla, which was then on its way back from Bengal after the defeat of Sultan Shuja, the brother of Aurangzeb. The date Hijra Era 1071=A. D. 1660-61, which is found inscribed on the pillar in connection with the Muhammadan creed and the name of Aurangzeb, points to this. I believe that the destruction of the northernmost pillar near Pipariya, some twenty miles distant from the Lauriya-Nandangarh pillar, is due to the same agency. The Lauriya-Araraj pillar, near Thana Gobindgunj, has lost its capital, but is otherwise in a fair state of preservation. Both Lauriya pillars seem to suffer considerably on their northern faces from the effect of the weather; they look quite black there, and their polish, although beautifully preserved otherwise, has gone in these portions. A few small cracks also begin to spoil the writing, which, however, is still in a very fair state. I am afraid no preventive measures against this are available. Perhaps the pillars might be cleaned from time to time, provided this is done with great care. Although they are now surrounded by iron railings, vandal scribbling of names on them is still going on. The latest addition to this illustrations list is the name of S. P. Sinha, a Sub-Inspector of Police from the Lauriya out-post, who recorded his name on the Lauriya-Nandangarh pillar as lately as the 31st May 1898. Luckily the ancient edicts are so high up that they cannot be reached without the help of a ladder. These modern names are all on the lower, uninscribed surface of the pillars.

The northernmost, so-called Rampurwa pillar, near village Pipariya, is still deplorably neglected. I have accordingly, in my letter No. 40, dated the 1st May 1902, submitted a special report on this pillar, proposing that it might be put up again in its original position. Its broken base still stands *in situ*, midway between two low earthen mounds covered with brick fragments, evidently the remains of some Buddhistic monuments. The greater portion of its shaft now lies within a swamp, almost entirely under water, some 800 or 1,000 feet to the north of its base. Evidently an attempt was made to remove it, which, however, soon was given up on account of its difficulty and costliness. Close to it stands the capital, which was disconnected from the shaft by Mr. Garrick in 1881 in order to take a photograph of it. It still stands in the same position as put up by Mr. Garrick, but the lion was

already then lost, and it seems hopeless to recover it. Only the broken feet of the lion are still on the top of the capital.

The three Asoka pillars are by far the most important remains in the district, and range among the most valuable ancient monuments of India. It is for this reason that I venture to hope that my suggestions with regard to the conservation of the Rampurwa pillar will meet with favourable consideration by Government.

10. *The Kesariya and Sagardih Stupas.*—The first stupa stands two miles to the south-west of Thana Kesariya. It consists of a round brick tower raised upon a brick platform. I think General Cunningham is right in identifying it with one of the monuments described by the Chinese pilgrim Hsien Tsang. It was at that time, in the 7th century A. D., believed to have been erected over a place where Buddha, in one of his former births, had appeared as a Chakravartti or universal monarch. From its general appearance it may well be ascribed to the first centuries of the Christian Era. The absence of any surface ornamentation around the tower is remarkable. Apparently these have disappeared in the course of time. A hole has been dug into the tower, probably by some treasure-seeker. There is, however, little probability that it contains any relic deposit, as for the reason stated above, the monument seems to belong to the class of memorial stupas, of which many existed in India at various places, connected with some remarkable event in the life of Buddha or other saints. The platform of the stupa is now covered with thick jungle, and difficult of access. Without clearing away the jungle and making some excavations all around it, it is impossible to form an idea of its exact structure. I think, however, that this would be worth undertaking, although the site does not seem promising with regard to statues and sculptures. Probably the stupa had only some plain ornaments around its surface. I did not find the statue of Buddha inside a low brick mound close to the stupa which General Cunningham mentions; the mound, which has been excavated several times, may still be seen.

The mound called Sagardih by General Cunningham is locally known simply as 'bhisa' or mound. The village Sagar is close to it. It stands at a distance of some three or four miles from Pipra, on the road to Kesariya. Although it is now too thickly overgrown with jungle vegetation to allow of forming an accurate idea as to its original shape, I do not hesitate to accept General Cunningham's opinion that it was a Buddhist stupa. At the foot of the mound is the tomb of a Muhammadan saint called Mallang. It is a very insignificant, modern looking brick building, with vaulted roof. At a little distance there is a large tank with a *debi-ka-ashtan* on its borders, such as hundreds may be seen all over the country. Altogether, this place does not look like a promising site for any detailed investigation.

11. *Earthen barrows probably sepulchral mounds at Lauriya, 15 miles north of Bettiah.*—I believe these mounds would very well repay a systematic exploration. It would thus be possible to form an opinion as to their original destination. Hitherto, the only clue seems to be a short reference in the Bengal Administration Report from 1883-88, saying that a short time ago, a leaden and perhaps a second iron coffin with human bones was found in some of them. The various excavations by General Cunningham and his assistants have not yielded any results to speak of. When I was at Lauriya, Mr. Moore, the present Manager of the Lauriya farm, showed me some copper vessels, which, together with two ancient copper coins, had been dug up from one of the mounds. The copper vessels were of exactly the same shape as those at present in use, and, although covered with verdigris, may be of quite recent date. Of the coins, one belonged to Mahmud Shah of Jaunpur and had the date 847 A.H. = 1443 A.D. The other was very much worn off and could not be identified. From its size, it looked like a Græco-Indian or Indo-Scythic coin from the North-West, rather a remarkable find considering the locality; but nothing definite could be made out with regard to it.

I counted altogether fifteen mounds, some very small, some higher. They are arranged in three rows, one running from west to east up to the place where the Asoka pillar stands, and two parallel rows, running from north to south, at the western end of the first row. This arrangement suggests that they were erected according to some definite plan or scheme. Some of the eastern



mounds show fragments of brick on their surfaces; others seem to consist merely of earth, which in course of time has hardened and developed into a stiff clay, which is now to a large degree used by the natives of the place, who mix it with water in order to paint the walls of their houses.

12. *The Nandangarh and Chankigarh.*—These two remarkable ruins, which are situated in sight of each other, one close to Lauriya, 15 miles north of Bettiah, and the other some 10 or 11 miles north of it, are locally believed to be forts built by some ancient and fabulous Rajas. The former is generally called Navandgarh, but the actual local pronunciation is Nandangarh. From time to time attempts have been made to identify them with some of the large Buddhist stupas, mentioned by the Chinese pilgrims, which, from the distances and directions recorded by them, may be looked for in these or adjacent tracts of the country. Even recently Mr. V. A. Smith has upon similar calculations pronounced the Nandangarh to be the stupa erected by Asoka over the ashes of Buddha, but he freely admits the impossibility to affirm this positively, until an adequate survey of the entire groups of ruins is made, and well-devised excavations are effected. From my own preliminary observations I am not inclined to believe that these huge and, as it seems, solid masses of bricks are the remains of any buildings of this kind, and I should rather look upon them as some sort of fortifications. Around the Nandangarh the traces of an old ditch are still visible. On its top, which forms an oblong terrace, traces of some small brick buildings, perhaps watch-towers, remain. The Chankigarh, which is much higher, consists of two parts, one platform with sloping sides upon which rests an oblong building, the sides of which fall down perpendicularly, while only the top seems to be a little rounded. A broad winding pathway leads up to the top from the south. Above, no remains are seen, except some small insignificant shrines. At one place some digging has been done, apparently by Mr. Garrick in 1881, although in his report he makes no mention of this. Some sheets of water run around the mound, perhaps the remains of an old ditch. Both mounds seem to consist of solid masses of bricks some 300 to 500 feet in circumference, but I could not observe anything in their structure that resembles a Buddhist stupa. A detailed and systematic exploration of both the Nandangarh and Chankigarh is well worth undertaking, but this will require time and special funds.

13. *The remains at Simraon, Nonachaur-ka-garh, Sitakund and Bodiban.*—The remains at Simraon are already within Nepalese territory. It once must have been a large town surrounded by walls, traces of which are still visible; the boundary now runs along the southern wall. Close to the Isra tank is a math with a temple of Kaulali, bearing an inscription, the date of which corresponds to 1747 A.D. It seems, however, to refer not to the temple to which it is at present attached, but to another older structure. Another larger math is at some distance from the Isra tank, at a place called Ranivas. It contains a large temple of the Nepalese style, enshrining images of Rama and Sita. All these buildings are of quite recent date and possess very little interest. Some unimportant specimens of ancient statuary are found inside of them.

The Nonachaur-ka-garh is wrongly called Sarongarh in the List of Ancient Monuments in Bengal. Sarongarh is about two miles distant and does not contain any ancient remains. The Nonachaur-ka-garh is an oblong fort, divided into four smaller sections by two roads running through it, one in each direction. At the place where they meet an ancient tank exists, which is now silting up. All the four sides of each of the four smaller sections seem to have been protected by walls. They are now mostly dangerous of access, owing to the thick jungle which covers them.

Sitakund and Bodiban are two places close to the Pipra Railway Station. The remains at the former place are within an oblong enclosure wall, with a way running through each of its four sides. They consist of a deep circular pond, surrounded by bricks, with four ghats leading down to it, and of several modern looking temples and shrines, together with some Samadhs of Sadhus. The principal temple enshrines eight well-preserved images of an older date, viz., two Ganesas, one seated with four arms, and one dancing with eight arms; one Surya; one Hanuman; one Ravana, with 20 arms and 10 heads, five of which are only shown on the carving; one Vishnu; one Durga; and one Mahishamardini, or Durga, in the act of killing the buffalo-demon. The most



remarkable object of worship inside the Bediban temple, which stands on a high mound, apparently the remains of an older structure, is a slab bearing an inscription in Arabic or Persian. This stone now receives poojah from the Hindus of the place. Unfortunately, it is covered with such a thick layer of cement that it is impossible to read it. General Cunningham thought he could read the name of Mahmud Shah, whom he identified with the Jaunpur king of this name (1450 A.D.). This is probable. Guided by the fact that a Muhammadan inscription had become an object of Hindu worship, and by the style of the principal temples at Sitakund and Bediban, which closely resemble Muhammadan tombs, General Cunningham further started a theory that these places had originally belonged to the Muhammadans and had later on been appropriated by Hindus, a remarkable fact, if true, as generally the reverse has been the case. But I believe this theory has very little to speak in its favour. The peculiar style of the two temples may be observed at several places in Bihar, and does not point to a Muhammadan origin.

The remains mentioned in this paragraph are not worth preserving. Other still more insignificant remains at the same places have been left unmentioned.

#### B.—DISTRICT MUZAFFARPUR.

14. *The remains at Bakhra-Basar and at Hajipur.*—The remains at these two places are the only ancient monuments inspected by me in the Muzaffarpur district. At the former place the principal object of interest is the Asoka pillar already referred to in paragraph (9) of this report. Although it does not contain any inscription of Asoka, yet its style as well as its material distinctly point to its having been set up by order of this king. Moreover, it is possible to identify it with one of the Asoka pillars, mentioned by Hiuen Tsiang at the site of the ancient Vaisali, as General Cunningham has shown. No ancient inscription is found on it, but it has been scribbled all over by modern visitors. The pillar is much lower than the other ones, probably on account of the subsequent rising of the surface around it; also the polish is not as fine as on the other pillars, and the lion on its capital is clumsier than that at Lauriya-Nandagarh, and rests not on a circular abacus with the geese ornament around it, as at Lauriya-Nandagarh and Rampurwa, but on a square base without any ornamentation. Close to it is a low mound, upon which some Buddhist statues of the Pala time are enshrined within in a modern hut. Extensive remains are scattered all over the country for several miles distant. These have been identified by General Cunningham with the ruins of Vaisali, the capital of the Lichhavi country, a famous place in the history of Buddha. Dr. Hoey has recently attempted to set aside this identification, but his arguments are very little convincing. To check the various identifications put forward by General Cunningham would require a detailed and systematic survey of the whole area, accompanied by judicious excavations, a work which, for various reasons, seems to be promising of valuable results. The pillar at Bakhra is in good state of preservation.

Hajipur, an important place in later Muhammadan times, contains an old mosque with three domes, built by Makhsum, in the time of Akbar. This we learn from an inscription over its gateway. Unfortunately the exact date of this record could not be made out. The mosque is built of stone and in a fair state of preservation, except that some of the carvings in its outer walls have become defaced, owing to the influence of time. It is not very remarkable, neither on account of its style, nor for any other reason.

#### C.—DISTRICT GAYA.

15. *Preliminary remarks.*—The ancient remains inspected by me in this district will be dealt with in the following order:—

- The city of Gaya;
- Budh-Gaya and adjacent places;
- Kauwa Dol;
- The Barabar and Nagarjuni Hills;
- The remains at Dharawat, close to these hills;

The remains at Bela and Ner ;  
 The remains at Pai Bigha, Ghenjan, and Kispā ;  
 The Hindu temples at Koneh, Pali, Utern, Deo, and Umga ;  
 The remains at Pachar and Chion, near Rafiganj ;  
 The remains at Kurkihar, Panawa, Hasra Kol, and Bishenpur ;  
 The remains at Afsand and Parbati Pahar ;  
 The Muhammadan remains at Miranpur Nadera, Jaru, and Hasanpur  
 Kako.

This arrangement endeavours to group together those ancient remains, which either geographically or for other reasons are connected with each other. With the exception of the last item, all other remains are either Buddhist or Brahminical. There is scarcely any ancient place in this district as well as in the neighbouring district of Patna, where not ruins of both classes are found together. This is not a mere chance, but, as I have already pointed out in paragraph (6) of this report, it represents fairly accurately the state of affairs which prevailed throughout ancient Magadha in the last centuries before the downfall of Buddhism.

16. *The City of Gaya.*—The many temples which now adorn the sacred tirthas of Gaya, are more or less modern and afford but little archaeological interest. They contain, however, a number of ancient inscriptions and statues, with which I shall principally deal in this paragraph.

As regards inscriptions, I have already, in paragraph (5) of this report, mentioned the discovery of some new or unpublished documents at Gaya. One was found by Babu P. C. Mukherji, inside the Gadadhar temple. It probably refers to the erection of a temple to the Sun-God, and dates from the time of Nayapala, *i.e.*, the 10th century A.D. Unfortunately, it is now covered by a statue of Vishnu, and as there seems to be no chance of the owners of the temple agreeing to remove this image, only the beginning of it could be copied. Another very similar record of the same period was found by myself inside a small shrine in the compound of the Vishnupad temple. It tells us that Visvarupa, apparently a high official, well known to us from other Gaya inscriptions, adorned Gaya with a multitude of temples erected to Gadadhara and other deities. The inscription is not *in situ*, and it is impossible to say to which Gadadhar temple it refers; it is certainly not the present shrine of this name. The inscription near the Akshaya-vata or eternal banyan tree is of the same time and is interesting for the local history of Gaya, as it mentions this tree and thus shows that it existed as a tirtha already in the 10th century A. D. Close to it is the temple of Prapitamahesvara, to which a small Sanskrit inscription is attached. It is interesting both on account of its date and the light which it throws on the local history of Gaya. Its date is the Samvat year 1299, the new-moon tithi of Jyaishta, a Thursday, while the Suratrana (*i.e.*, Sultan) Maujadina was reigning. This Sultan must be identified with Muizuddin Bahram Shah of Delhi, who was taken prisoner on the 10th May 1242 A.D., and murdered on the 19th May of the same year. Calculating all the possible European equivalents of the Indian date, I find that both the 1st May 1242 A.D. and the 18th June 1243 A.D. would agree, both being a Thursday, coupled with the new-moon tithi of Jyaishta. But, as the inscription refers also to the reign of Muizuddin Bahram Shah, the first date only, *viz.*, 1st May 1242 A.D., is admissible, and the inscription thus was written only a few days before the end of this king. Its purpose is to record a pilgrimage to Gaya, which some Rajput minister, apparently from the North-West, had undertaken. He says: "I have done Gaya. Witness thereof is Prapitamaha." A statement of this kind is now technically called 'Sakshi-Sravana,' or 'invocation of witnesses.' It is incumbent upon every pilgrim either at the end of each of the stations which he has to go through, or at the completion of the whole pilgrimage, on the seventh day, to invoke the gods as witnesses that by completing the prescribed rites he has freed himself from the debt which he owes to his ancestors. In the present ritual, the 'eternal fig-tree' and the temple of Prapitamahesvara are the last station to which the pilgrim goes, and as a record of this kind refers just to the deity of the temple where the pilgrimage now ends, we may conclude that in one important point at least, the ritual to be observed at Gaya some 650 years ago was exactly the same as it now is.

I also copied a small Sati inscription at the Gadadhar temple and an inscription in Telugu characters near one of the ghats leading down to the river Phalgu. The latter I am unable to read myself. Other well-known inscriptions have been left unnoticed.

The only ancient statue, which I found at Gaya, is the figure of an elephant, represented in the act of culling flowers or fruits from a tree, a favourite subject in ancient Indian art. It is decidedly a carving of at least the beginning of the Christian era. It stands inside a small shrine on the way to the Vishnupad temple, and is locally called Gaya-gaja, or the Gaya elephant. I find it mentioned already in Narayanabhatta's Gayanushthana-Paddhati, a manual on the ritual to be observed at Gaya, about 300 years old. All the other images are of the style and material used in the Pala time (800—1200 A. D.), and probably also later on, but some are remarkable for various reasons, and will be noticed here accordingly. An image of Vishnu, seated cross-legged, with four arms, two of which rest on his lap, while the others hold club and wheel, is rare and not often met with. His female energy, Vaishnavi, is generally represented as seated on Garuda, but I found one image of her, where she is shown standing, with four arms, two of which hold a shell over her breasts, so that the top of the shell just touches her chin, while the other two hold club and wheel. A statue of Hari-Hara, i.e., half Vishnu, half Siva, was remarkable on account of its showing the phallic emblem of Siva; it must be very old, as subsequent ages considered such representations too indocent, and left out this emblem. I found also an image of Siva and Durga, representing them standing, their hands joined together with the nine planets above, and the bull and lion on the pedestal. This is a rare type, the common representation showing Durga seated on Siva's lap in an amorous posture. A standing figure of her, with bull kneeling to her right, and lion to her left side, probably might better be called an image of Mahesvari. On an image of Chamunda, one of the seven mothers, I found an inscription saying that it was the pious gift (deva-dharma, *sic*!) of Valahaka, the son of Adha; this term is generally met with only in Buddhist votive inscriptions, where it is exceedingly frequent. A curious piece of carving, not altogether rare, represents five round balls, resting on a square plate. When questioned as to its meanings, the local people explained it as a representation of the breasts of Bhagavati. Rude figures of the same meaning are certainly found almost in every village of Bihar, but their shape is different, and I do not know whether the local explanation holds good. I need scarcely refer to the multitude of lingas or Mahadevas found at Gaya. Some imitate nature with a certain accurateness, while others are merely conventional. Some show a great number of small lingas carved around them; they are called 'Sahasra-lingas'; others have one, four, or even five heads of various gods and goddesses carved upon their round surfaces. They are called: ek-mukhi, chau-mukhi, and panch-mukhi Mahadevas respectively. A chaturmukha Mahadeva is already mentioned in an ancient inscription from Budhi-Gaya, published by General Cunningham in his Mahabodhi, where he has misunderstood the term.

The absence of Buddhist images in Gaya is remarkable. I found only a few inside the shrine on the top of the Pretsila Hill, and also at some other places. The temple on the Pretsila Hill contains an inscription both in Nagari and Bengali characters, the date of which corresponds to Saturday, the 23rd July 1774 A. D. (new style). It says that the steps leading up to the hill were built, for the convenience of pilgrims, at the expense of Madan Mohan Dutt of Calcutta; the gomasta was Ganga Narayan Kar of Orissa, village Gopalpur, pargana Balu, Sirkar Cuttack; the tabildar was Kali Charan Chaudhuri, of village Simlagadi, pargana Pandua, in Burdwan. It took one year to complete this work.

A modern dharamsala in front of the Prapitamahesvara temple bears a date corresponding to Sunday, the 4th February 1849 A. D. Inside the temple, on the Brahmayoni Hill, are some footprints dedicated by Maharaja Jayaji Rao Sindhia. The last hill receives its name from a small natural fissure in the rocks on its top, which just enables a person to crawl through it. This is looked upon as a symbol of the yoni or womb, and the pilgrim by going through this procedure escapes the fate of being reborn from a human womb.

Other temples and shrines visited by me call for no remarks here.

17. *Budh-Gaya and environs.*—I do not consider it necessary to offer any remarks here on the great temple at Budh-Gaya and its surroundings, as they at present stand. In addition to the known inscriptions on the ancient railing, I found another unnoticed one on one of the pillars, which are now inside the Bakraur Math. It says that the pillar was the gift of Nagadeva, the wife of Raja Bujhamita. On one of the statues inside the great temple, I found an inscription saying that it was presented by Indrabhadra, who came from Samatata, i.e., Lower Bengal. He appears to have been a spiritual descendant of Silabhadra, of the royal family of Samatata, who at the time of Hiuen Tsaang's visit (635 A. D.) was a venerable man of over eighty years. The monastery, where he resided, has been identified with some site near the modern Dharawat. I have met with other instances showing that monks adopted names formed with the same compound as the names of their gurus and pragurus, teachers and teacher's teachers. Evidently, they chose a new name on entering the order, as modern sanyasis still do. On a railing pillar outside the great temple is an inscription in modern characters saying that a pandit Jinadasa, who came from the hills, visited the Mahabodhi-bhattacharya, evidently the Bodhi-tree. He has forgotten to record the year; the inscription concludes abruptly with Samvat, without any numerical figures, but the characters are scarcely older than the 15th century A. D. There is, however, nothing remarkable about this record, as the Bodhi-tree still is, and apparently long ago has been, one of the sacred places visited by the Hindu pilgrims going to Gaya.

Other places near Budh-Gaya, to which Hindus have to make a pilgrimage, are Dharmarai and Matangi. The latter name is a corruption of Matanga linga. It contains a tank, called Matanga-vapi, which has been dug out later on within the area of an older and larger one, which has now entirely silted up. Close to it is a modern temple with a linga, called Matangesa. As the ancient stupa identified by General Cunningham with the Gandhabasti stupa, or the place where Buddha formerly had appeared as a large elephant, is very near to it, and as Matanga in Sanskrit means 'Elephant,' it seems obvious that the names Matanga-vapi and Matangesa contain a reminiscence of this ancient Buddhist site. Another place near Budh-Gaya deserves mention for one reason. It is visited by the Burmese as the traditional spot where Buddha was sheltered by the snake-king Muchilinda. Locally it is called Mucharin, which is evidently a corruption of Muchilinda. There is nothing to be seen there except an old tank. General Cunningham tells us that in 1861 he made this identification with the help of Hiuen Tsaang, and that he suggested the same to the members of some Burmese embassy, whom he happened to meet there, and who at once accepted his theory. I think there is little doubt that the worship, which this wholly insignificant spot now receives from the Burmese, is due to General Cunningham's identification.

The cave on the Mora Hill, to the north-east of Budh-Gaya, is traditionally believed to be the Pragbodhi, a place where Buddha resided for some time before he reached Uruvilva, the modern Budh-Gaya. The cave is a natural fissure in the rock, about midway to the top of the hill. Its entrance has recently been closed by a masonry wall, put up by the Jogi who resided in the cave. It admits access only through a small door. No ancient remains of any importance are to be seen at this place.

18. *Kausha Dol.*—The remains here are the ruins of an ancient Buddhist temple and a number of rock carved images, all along the foot of the hill. The temple enshrines a large statue of Buddha, seated, in the act of invoking the earth, when he was attacked by Mara and his army. This is one of the largest statues of Buddha which exist, and in fair preservation, except that a portion of the halo has broken. It still is *in situ* inside a small brick-built cell, but the temple is otherwise in utter ruins, only parts of its original brick-walls and some 13 granite pillars being traceable. The pillars probably supported an open hall in front of the temple.

The rock carvings represent almost exclusively Brahmanical deities. I only observed three Buddhist figures among them, viz., one Vajrasattva, one Prajnaparamita, and one seated Buddha. The row in which I found these images continued with other Hindu deities, a further instance of the intermixture of both sects, to which I have already had occasion to point. The great

prevalence of figures of Mahishamardini among these carvings deserves to be noted. All the carvings may belong to the period from 800 to 1200 A.D. The stone does not withstand the influence of the climate, and some carvings have become very faint.

19. *Barabar and Nagarjuni Hills.*—The ancient rock-cut caves on those hills belong to the most interesting remains in this province; they exhibit fine specimens of the high proficiency with which in those remote ages, 3rd century B.C., Indian masons were able to handle such a hard material as the granite stone of those hills. Their polish is of a high order, and still almost perfect. Unfortunately, it has in some places become spoilt by Jogis and Sadhus, who consider it their right to reside inside the caves, and who put up crude stone walls against them. I found four of the caves inhabited by those worthies: one was a Bengali from Howrah, with University education. An immediate stop should be put to such a nuisance, and every modern occupant should be turned out at once.

There are altogether seven caves, four on the Barabar and three on the Nagarjuni hills. The former were dedicated by Asoka and the latter by his grandson, Dasaratha, to members of the Ajivika order, an ancient class of Brahmanical ascetics. Subsequent inscriptions show that in the middle ages also Hindu ascetics dwelt in them; probably they were never appropriated by Buddhist. It is evidently for this reason that they were not visited by the Chinese pilgrims, although their routes took them into the immediate vicinity of the caves.

20. *Dharawat.*—The remains of an ancient stupa, described by General Cunningham, are to the south of the Chandokar talao, midway up the hill. Only fresh excavation can throw new light on these structures. Two modern temples in the north-eastern corner of the tank, and a small shrine at some distance to the east, contain a large collection of ancient statues. I have already, in paragraph 6 of this report, referred to the remarkable image of Kartikayini with the Buddhist creed, which I saw there. A large statue of Avalokitesvara is lying, apparently uncared for, between both temples. It is a very curious piece of carving, and might, probably, without difficulty be removed to the Indian Museum. I observed also a curious figure of Surya inside the southern temple, which represents him with four arms, two of which rest on his knees, one holding a rosary and the other a water-vessel, while the other two are uplifted and hold each one full-blown lotus. The horses drawing his chariot are represented not, as usual, *en face*, but *en profil*.

21. *Bela and Nur.*—The modern temple close to the Bela Inspection Bungalow contains one remarkably well-preserved big statue of Chamunda and a number of smaller ones, notably a carving showing three goddesses standing in one row, which seem to represent Brahmani, Sivani, and Vaishnavi. Close to the modern temple are the ruins of an older one, now mere heaps of bricks with two lingas standing upon them.

The temple at Nur is of little interest only. Its walls, and a pillared hall in front of it, are still standing. They are just inside the village, obstructed by modern mud-huts, and seem to be used as a cow pen. To the west of the village are the ruins of another temple, which seems to have stood inside a tank. They are very much gone, and very little remains of this structure.

I noted here some remarkable lingas, with four male figures around them, two standing and two dancing, both groups on corresponding sides; on each side of the pedestal, which is a square, a male figure is represented lying. I was unable to make out the meaning of these carved figures.

22. *Pai Bigha, Ghenjan, and Kinspa.*—Pai Bigha is a large village near Makhampur station, where, according to the list of ancient monuments in Bengal, some antiquarian remains are said to exist. The place had better be struck out from the list. The collection of ancient sculptures inside the village shrine is of no importance at all; a dilapidated Idgah outside the village deserves no mention; and what Mr. Beglar considers the remains of an ancient Siva temple, are merely some crude fragments of granite pillars, marked with the *triratna*, such as may be found in almost every village of the district.

At Ghenjan, some ancient Buddhist and Hindu statues may be seen, among others an image of Brahmani and Sivani. The principal figure is a large seated Buddha, wearing necklace and three-pointed diadem. Statues

of this kind are exceedingly common, but their meaning still remains a matter of doubt. They exhibit all the various postures and attitudes of the ascetic Buddha; but why in them he wears a necklace and a diadem,—a garb not suitable for an anchorite, is puzzling. The ruins of an ancient brick temple also exist to the north-east of the village.

At Ghanjan I found on the pedestal of a large statue of Avalokitesvara an inscription, which says that it was the gift of the Sthavira Ratna Sinha, who came from Nalanda, and was the disciple of the Sthavira Vridha Sinha, and that it was dedicated by him for the benefit of his disciples Jnana Sinha and Uddyota Sinha. This is a remarkable instance of the adoption by Buddhist monks of names formed with the same compound as the names of their spiritual fathers, to which I had already previously, in paragraph (17), occasion to allude. A fragment of another identical inscription was lying close by. The modern temple at this place contains a large standing figure of Tara, now worshipped as Bhagavati, and carefully hidden by a yellow piece of cloth, which the priests at first refused to remove, under the pretext that the lady had to be kept in *purdah*; but they yielded to my request later on. Many minor images are collected at this temple, and at some distance stand in the open field a large Buddha, and Vishnu on Garuda. I observed also a broken Suraj (Narain, a peculiar form of linga, with small figures of Siva, Surya, and Lakshmi.

23. *Konch Pali, Uren, Deo, and Umga.*—I have grouped these places together, because I consider it evident that the temple at Konch is of the same period as the temples at Deo and Umga. The resemblance in style is remarkable. It originally had in front a flat-roofed pillared hall or mandapa, which still may be seen on an old photograph, taken by Mr. Peppé, but which now has fallen in, the stone pillars supporting it, still lying in front of the temple. The same is characteristic for the temples at Deo and Umga and the ornamentation of the spire at Deo also is of the same kind as at Konch. The temple at Umga is plain, without ornaments. Moreover, tradition points to Bhairavendra, who lived about 1450 A.D., as the builder of the Konch temple. From his time also date, as we know from local inscriptions, the principal monuments at Deo and Umga. For these reasons, I think that the hitherto accepted date of the Konch temple, *viz.*, eighth century A.D., should be put back for some seven centuries. The temple at Konch is not in a good state of preservation; although repaired some time ago, a great portion of the brick wall in front of the spire has fallen down. The building is worth being kept in a permanent state of repairs.

Inside the temple, the most remarkable piece of carving is a slab representing the Avatars or incarnations of Vishnu. It is distinguished from other similar representations by dividing the Vamana Avatara into two scenes, by leaving out the ninth or Buddha Avatara, and by representing Vishnu in his tenth or Kalki Avatara in the company of a female deity, with a small horse standing in front of them. I am unable to suggest a reason for these peculiarities. Other statues, also Buddhistic images, and remains of other minor temples abound at this place.

Pali and Uren are two small places near Konch, where some remains of no great interest may be seen. The temple at Pali is almost entirely gone, only some pillars and a statue of Brahma still standing amongst its brick ruins. At Uren are the remains of an old fort, probably Muhammadan, with a Muhammadan dargah.

Umga contains a great number of temples on the rocky spar close to the village, mostly in a very ruinous state, with the exception of the principal one, which stands lowest on the hill and closest to the village. The inscriptions found there have already been mentioned; they help us to settle the date of these monuments. Besides, they contain a list of fourteen local Rajas down to Bhairavendra (1450 A.D.) He died childless, and his widow adopted two Rajputs who happened to come to Umga on a pilgrimage to Gaya. Some 150 years hereafter, the family removed their residence from Umga to Deo, where they still reside. Traces of the old palace near Umga may still be seen. The temple at Deo probably dates from this time, although local tradition gives it a fabulous age. It is in very good preservation, and still in use. Among the sculptures collected inside of it, the prevalence of

the Suraj-Narain symbol deserves to be noted. The temple is dedicated to this deity, as also the principal temple at Unga.

24. *Pachar, Cheon and Deokuli*.—These places are all close to Rafiganj. The principal object of interest is a cave in the southern face of the Pachar hill. It is a natural fissure in the rocks, the opening of which has been closed by a brick-wall, giving access to the cave through a small, stone-faced door. In front of it stands a portico, resting on stone-pillars. Inside the cave is a large statue of Paravanatha, seated, and other minor images, evidently all Jain. I could find no traces of any Buddhist remains in this cave, and it evidently belonged to the Jains. An inscription on its wall in rather modern characters says that a certain person, whose name could not be read, worships constantly Paravanatha. The existence of a Jain sanctuary in this locality is of some interest on account of its isolation. All other remains at Cheon, Deokuli and neighbouring villages are either Hindu temples or Muhammadan mosques and dargahs. They are of very little importance and need not be detailed here. Close to Cheon, in the open field, stands a rather well preserved large statue of Hari-Hara.

25. *Kurkihar, Punawa, Hasra Kol and Bishenpur*.—The extensive remains near Kurkihar still yield a great number of fine Buddhist images. A large collection of these may be seen in the modern village temple. Others, recently found, are now placed inside the zamindar's bungalow. These it will be possible to remove to Calcutta, where other statues, previously found there, have already gone to. The great mound south of the village is also an extensive quarry for bricks, and is dug into by the natives of the place at random. It is a great pity that never any judiciously devised excavations have been carried out at this place. It is a promising site, and the work would be worth undertaking. The vandal digging for bricks, which is now going on there, is likely, in course of time, to destroy all that exists.

This has happened already at Punawa, a place close to Kurkihar, where now scarcely anything exists. The remains of the temple of Triloknath, described by General Cunningham, have all been carried away since by the local zamindars, and nothing is left of them.

Hasra Kol has been identified recently by Dr. Stein with the Kukuta-pada-Vihara, or the cock's foot monastery, mentioned by Hsien Tsiang, which Cunningham erroneously located at Kurkihar. The valley between the two parallel ridges of hills abounds in ruins of ancient temples, &c., evidently both Hindu and Buddhist. A detailed survey of this area will be worth undertaking, as very little is yet known about it, and no accurate description exists. Three very fine Buddhist statues, said to have come from the Hasra Kol, are now placed inside a wretched small brick-house in the neighbouring village, Bishenpur. The principal figure is a large seated Buddha, with two attendants, one being Maitreya, the future Buddha, and the other evidently some form of Avalokitesvara. They are the finest specimens of Buddhist sculpture of the Pala time that I have seen, and for this reason it is a matter of regret that they are now hidden away at such an out-of-the-way place, where they are hardly accessible to any student of Art. I shall accordingly later on submit a special proposal for their removal to the Indian Museum.

26. *Afsand and Parabati Pahar*.—The big statue of a boar at Afsand, representing the Varaha Avatara of Vishnu, is one of the most interesting remains in the district. Its style, as well as its material, grey sandstone, distinctly point to the Gupta period. It closely resembles the boar statue at Eran, in the Central Provinces, which belongs to the same period. The earth, represented as a female, grasps one of the boar's tusks in order to mount the boar's neck. The whole body of the boar is covered with small figures of Rishis, represented generally in worshipping gestures. The statue stands in front of a high brick mound, evidently the temple of Vishnu, built by Adityasena, one of the later Guptas of Magadha, of about 600 A. D., whose long and important inscription, found at the same place, has become lost; it appears, soon after Major Kittere discovered it and took a copy of it. His copy fortunately still exists. The structural remains of this temple, which are now buried below this mound, seem to be fairly well preserved, and a judicious excavation of the mound probably will reveal a great deal

of the ancient building. It would be a work worth undertaking, as Hindu temples of such a remote period are very rare and as, in this province at least, scarcely any remains of the same kind exist, which seem to be such a promising field for excavation. Other later statues are seen close to the mound, all were Hindu images, and I found no Buddhist statue at this place.

The remains at Parbatī Pahar are of very little interest. They consist principally of the dargah of Hājī Chand, Saudagar on the hill, a small insignificant building, occupying, as it seems, some ancient Buddhist site. Many heaps of bricks, also a few images, are found all over the hill and around the village.

27. *Miranpur Nadera, Jaru, Hasanpur Kako.*—The remains at these places are the only Muhammadan buildings inspected by me in the district of Gaya. The first two places are in the vicinity of the Barabar Hills, the last place lies some 5 miles to the east of Jahanabad. The dargah of Miran Shah at Nadera and some mosques close to it seem to be rather modern, and afford little of interest. They are kept in permanent repairs, and covered with white-wash. On one of the tombs I observed a linga put up against the head end. The mosque at Jaru is a building of the Moghul period. It can, on no account, be anterior to Sher Shah's time, but I am inclined to consider it as later. It is built partly of brick and partly of granite stones. Every detail of its ornamentation, which is not without taste, points to the Moghul period. It has three domes, and three prayer niches in back wall. The dargah of Bibi Kamal at Hasanpur Kako is very modernized, and little remains of its ancient structure. Fragments of glazed tiles, now placed in the walls, show that it must have been a monument of some consequence. No information with regard to its date is available. Fragments of some Arabic or Persian inscriptions on tiles are now placed over one of its gates, but they are not *in situ* and give no connected reading. Another inscribed stone slab is too much defaced to be read. A second mausoleum, called chota dargah, at the same place, deserves no mention.

#### D.—PATNA DISTRICT.

28. *General remarks.*—A number of the ancient remains in the district are of the same order as those in the district of Gaya. The modern city of Patna, Hilsa, Telara, Bihar, and Manor contain prominently and almost exclusively Muhammadan monuments. The dargah at Manor is one of the finest buildings of the Moghul time in this province. The ancient monuments inspected by me in the district of Patna will be described in the following order:—

Ancient Pataliputra and modern Patna;  
Rajgir and Giriyak;  
Silao, Jagdispur and Baragaon (Nalanda);  
Ghosrawan, Tetrawan and Pawapuri;  
Hilsa and Telara;  
Bihar;  
Manor.

29. *Ancient Pataliputra and modern Patna.*—The remains of ancient Pataliputra, the capital of Asoka, which, for some years past, have formed the object of extensive excavations, lie partly to the south of the East Indian Railway line, partly under the modern towns of Patna and Bankipur. The result of these excavations cannot be said to have answered the rather sanguine hopes, which some eminent Indian archaeologists, such as the late Professor Bühler, has entertained with regard to them. However, some of the ancient sites mentioned by the Chinese pilgrims have now been located with more or less certainty, and some fragments of ancient sculpture found during the excavations show that perhaps later on a day may come, when this ancient place will yield some important finds. The huge, solid mass of bricks, now buried under the Choti Pahar, evidently represents the ruins of a Buddhist stupa of great age, but the various excavations, which have been carried on there down to a considerable depth below surface, have brought to light no object of any interest. Another larger mound close to it, called the Bari Pahar, has not been dug into. The modern Agam Kua, a large well, evidently stands on an ancient site. Some 15 minutes distant from it stands an ancient carved



stone showing on each side a female standing, and holding the branch of a tree. Close to it lie the fragments of an Asoka pillar, which have been found during the excavations. Although no inscription is on them, yet their polish as well as the material, sandstone, so closely resemble the other Asoka pillars, that no doubt can be entertained with regard to this find. A large capital of Greek style of the Ionian order also was brought to light during the excavations. It was placed inside the golah at Bankipur, but at the time of my visit, it was no more there, and nobody seemed to know anything about it.

The oldest monument among the ancient buildings of the modern city of Patna, which are exclusively Muhammadan, is the mosque of the time of Sher Shah. There is no inscription on it, but there is no reason to doubt its traditional date. It is built of bricks, and covered by one large dome in centre resting on an octagonal spring. In each corner is a smaller dome, and between these four smaller domes, on each side, are one larger and two smaller vaulted roofs. The back wall has three prayer niches. Some repairs have been done to this mosque, but it is still in bad order, and some more might be done, as the building is remarkable on account of its style. Outside the mosque are a number of tombs, mostly modern. The oldest are the tomb of Koka Khan, who died in 1772 A. D., and of Mirza Aziz, who died in 1808 A. D. Another mosque, called Pather-ka-masjid, is of some interest on account of its inscription, which tells us that it was built by Parwez Shah, the son of Jahangir, out of the materials of the fort Majauli and a Hindu temple, which he had destroyed. Its date is the Hijra year 1036, which began on the 22nd October 1626 A. D. Numerous other mosques and dargahs call for no remarks here, except that some of the ancient carved stones from Gaur, in the district of Maldah, are found built into them, as also into private houses. These materials have been carried away rather a long distance.

30. *Rajgir and Giriyak.*—Rajgir, the ancient Rajagriha, the first capital of Magadha, is now principally a sacred place of the Jains, who come there in great numbers from far away. They visit all the shrines on the tops of the five hills. These shrines are all of very recent date. They generally contain a stone with the foot-prints or padukas of some Jain Tirthankar. Older ruined shrines of the middle ages are also found there, but they no longer form an object of worship. Numerous Jain images are seen inside of them. I think the Jains had settled there already from the beginning of our era, as I believe that the famous Sonbhandar, or Gold Treasury cave, at the southern foot of the Baibhar hill, was made by a Jain monk for the use of his own sect. This I conclude from an inscription in the outside wall of the cave. It is a Sanskrit verse, telling us that the famous teacher Muni Vairadeva made two caves which are a suitable resort for ascetics who wish to attain to nirvana, and which are renowned on account of Arhants. The two caves referred to in this inscription can only be the caves where the record is engraved; in fact, there are two caves there close to each other, one the so-called Sonbhandar, and the other now in ruins. The mention of the Arhants, as also other technical terms in this inscription, distinctly point to the Jains. There is, moreover, just below the inscription a now mutilated carving of Jain Tirthankar of apparently the same period. The period of the inscription may be stated as the 3rd century A. D. on account of the shape of its writing. As the caves at the time when the Chinese pilgrims visited Rajgir probably were still occupied by Jain monks, we may assume that they have been left unnoticed by them, as, for a similar reason, the caves on the Barabar and Nagarjuni hills (see above paragraph 19), and we need not try any further identification of them with some of the sacred Buddhist sites mentioned by the pilgrims. I need scarcely remark here that General Cunningham's identification of the Sonbhandar cave with the Saptaparna cave, the traditional site of the first Buddhist Synod, has never met with any approval. The latter site, in all probability, is identical with the large natural caves near the top of the Baibhar hill, on its northern face.

A detailed and systematic exploration of all the hills near Rajgir, which seems to me worth undertaking, probably will bring to light more Buddhist remains, which at present are comparatively scanty. To the Hindus the hot springs at the foot of the Baibhar hill now form the principal object of

worship. There is also an old ruined temple of Mahadeva on the same hill, close to the old Jain temples.

The stupa at Giryek is undoubtedly a Buddhist monument of considerable age. If some clearing of rubbish around it could be done, it would be easy to prepare a good drawing of this important monument, showing its restoration to scale. The drums upon which the large hemispherical dome rested appear to have been comparatively low; they were probably only from three to five in number. They again rested on square terraces, divided by small pilasters in several niches or recesses. Some of the surface ornaments are still well preserved. They exhibit various patterns of flowers. The stupa was built entirely of bricks. A hole has been dug into it from the western side to take out the relic deposit. But, as shown by General Cunningham, the building was evidently a memorial stupa, and did not contain any relics. It is the best preserved building of its kind in my circle, and a good drawing of it seems desirable; but it can only be prepared by help of excavation of the *débris* around the stupa. Close to it exist the remains of a water reservoir, and at a little distance to the west there are extensive brick ruins, the remains of a monastery or vihara, which was connected with the stupa by a pathway, which still may be traced. This monastery is now in too ruinous a state to allow of forming an opinion as to its structure without making extensive excavations.

31. *Silao, Jagdispur, and Baragaon (Nalanda).*—Silao, which is an important village on the road from Rajgir to Bihar, is mentioned here merely on account of some ancient stones with Buddhist carvings which have been used as building materials for the principal mosque of this place. Jagdispur is only a short distance from Baragaon. It contains a very interesting large statue of Buddha, which, with minor images, now stands on the top of a low mound, apparently the *débris* of a Buddhist temple. This statue shows Buddha attacked by Mara and his army, and around this are seven minor relief scenes representing other events in the life of Buddha. His nirvana is represented at the head of the image. Similar statues are by no means rare among the Bihar sculptures, but the relief scenes on them as a rule show Buddha, the principal figure, only, with not more than one or two attendants, while on the Jagdispur statue each relieve exhibits a great number of attendant figures. This seems to point to a greater age of the Jagdispur statue than that of the bulk of Bihar statues, as it resembles more the character of older Buddhist sculptures, such as those from Gandhara. Some of the figures with animal heads in the army of Mara also remind one of similar ones in well-known Gandhara carvings, and in the nirvana scene we observe above some hands without a body playing drum and cymbal, representations of the heavenly music which filled the air at all the great events in Buddha's career, a motive which is also frequently met with in Gandhara art.

The high mounds which now bury the principal buildings of the once famous Nalanda, near the modern village of Baragaon, may be seen for a long distance. Some of the principal mounds have been dug into previously, but, unfortunately, no records were kept, and no good accounts are available with regard to these excavations. Other mounds have remained untouched, and some of them seem to be promising sites for excavation. The buildings here do not seem to be in such a ruinous state as to have been reduced to mere heaps of bricks. A detailed and systematic exploration of the whole area seems very desirable. Among the Buddhist statues here, the most remarkable is an image of Buddha seated with an attendant on each side, and two flying figures holding garlands above. It is notable for one reason, *viz.*, because to each of these four minor figures is added a short inscription, which tells us the name of the person which it is meant to represent. This is unfortunately very rare in Buddhist statues, and the work of identifying all the numerous representations from the Buddhist Pantheon consequently labours under great difficulties. We here recognize, by means of those inscriptions, the two attendants below as Arya-Vasumitra and Arya-Maitreya, while the two flying figures above are Arya-Sariputra and Arya-Mandgalyayana, the two principal disciples of Buddha. No objection can have been raised against representing them in such a posture, as, being Arhats, they were possessed of the power of flying through the air.

In the village of Baragaon is also a modern Jain temple with some ancient sculptures, which is now visited by some of the Jain pilgrims on their way from or to Rajgir.

32. *Pawapuri, Ghosrawan, and Tetrawan.*—Pawapuri is a very holy tirtha of the Jains, it being the place where, according to their tradition, the last founder of their sect, Vardhamana Mahavira, attained to nirvana. It contains absolutely nothing ancient. The large temples here are all modern and are of no antiquarian interest. It lies close to the Bihar-Nawadah road.

Ghosrawan and Tetrawan are both some three or four miles distant to the east, and can only be reached *via* Pawapuri. Both places must once have contained large Buddhist settlements, as a great number of Buddhist statues are now collected inside of them, which evidently have been dug up in the neighbourhood. At Ghosrawan some ruined brick mounds are still to be seen; also a big mud fort. The principal figures at Tetrawan are a colossal seated Buddha, now on a brick terrace at the southern border of a large tank, outside the village; also a large statue of Marichi, in one of the modern temples there. A short inscription on a small Buddhist statue at the same place is of some interest, as it probably contains the old name of the village. It says that the statue was the gift of Tantara Ateka. This may be interpreted as Ateka from Tantara, and the latter may be an older form of the modern Tetrawan.

33. *Hilsa and Telara.*—The dargah of Shah Juman Madari at Hilsa is a place of far-reaching fame. It is a simple, square brick building, covered by one dome. It has one door only, in its southern wall. The three other walls have each one prayer niche inside. There are seven tombs inside, of which the westernmost is said to be that of the saint. An inscription over the gate, the date of which corresponds to the 3rd June 1543 A.D., tells us that in the time of Sher Shah the tomb (gumbaz) of Miran Sayyid Juman Madari was repaired by order of Miyan Shaikh Alam Adam Shah Juman Madari, at the expenses of Darya Khan Zangi, an officer of the body-guard. The original building thus appears to be older than 1543 A.D., but it cannot have been much anterior, as Shah Madar, the founder of the Madari order, to which the saints mentioned in the inscription belonged, is said to have been a contemporary of Ibrahim Shah of Jaunpur, who reigned from 1400 to 1440 A.D. Another inscription refers to the building of a mosque near the dargah, by a person called Riza. Its date corresponds to 1604 A.D., and it is of some historical interest, as it refers to Jahangir, who is called Shah Salim, as the reigning King. His father, Akbar, was still alive at that time, but Jahangir was already in open rebellion against him. He already then struck coins, with the name Salim, of which numerous specimens exist. The mosque, built by Riza, is no longer in existence, and the present one is an insignificant, modern building. The dargah is kept in fair order.

Telara, the ancient Tailadhaka, is the site of a famous Buddhist monastery, of which, however, very little remains. Some ancient stones have been used as building materials for the mosque there, which is called the Sangi Masjid, and for the dargah of Sayyid Yusuf Abdal, close to it. Both stand on a high mound, apparently the site of some Buddhist building. On one of the stones, which is now used as a lintel over the door to the mosque I found the ancient name of the place, Tailadhaka, written in characters of the Pala time. Inside the dargah is an inscription of Sher Shah's time, which has become very much defaced. Both the mosque and the dargah are of no special interest.

34. *Bihar.*—The only Hindu remains in Bihar are the sandstone pillars, now put up in the Subdivisional Officer's compound. One of them bears an important Sanskrit inscription of the time of the Gupta kings. It has been put up upside-down, apparently because, below the inscription, no vacant space remains to afford a support for the pillar.

The fort is in utter ruins, but traces of its walls, &c., remain. A gateway, which was still standing some 30 years ago, has now entirely broken down. Ancient Buddhist carvings have been used in building the various mosques and dargahs, which now adorn the place. The principal dargah is that of Malik Ibrahim Bayyu, who, according to the inscriptions on its walls, died on the 24th January 1353 A.D. It stands on the top of the Bihar hill and closely

resembles the dargah of Juman Madari at Hilsa (paragraph 33). The curved battlement, which is so common a feature in similar buildings of the same period in Bengal, is not met with here; in fact, this peculiarity seems to have been confined to Bengal only. The tomb of the saint is in the centre, with ten smaller ones around it. The dargah is in a fair state of repairs. Other dargahs have no domed buildings, but consist merely of open tombs, with mosques, musafirhanas, and other houses in their compound. The principal ones are the dargah of Sherafuddin, Qadir Qumaish, and Shah Ahmad Charamposh. The dargah of Qadir Qumaish contains merely buildings of very recent date, not more than sixteen years old; but some ancient carvings may be seen here. The dargah of Shah Ahmad Charamposh has an ancient gateway, coming from some Buddhist or Hindu temple, with elaborate delicate carvings. Some of the carvings have been chiselled off, and Persian verses, expressing moral and religious precepts, have been engraved in their place. The Juma mosque was built in the time of Akbar, at the instance of Said Khan, who was Governor of Bihar from 1004 to 1010 Hijra era. The date of the inscription is the Hijra year 1004 which began on the 6th September 1595 A.D. Said Khan is said to have had a special passion for eunuchs, of which he had 1,200. One of them, Ikhtiyar Khan, who acted as his Wakil, was the builder of this mosque. Another mosque was built in Shah Jahan's time by Habib Khan, an Afghan of the Sur clan. Its date is the Hijri year 1047, which began on the 26th May 1637 A.D. There are other mosques of the same period, but they have no inscriptions. All these buildings are generally in a fair state of preservation. Numerous ancient Muhammadan inscriptions have been carried away from Bihar to Calcutta; others are still lying inside the principal dargahs. They all have been deciphered and translated previously.

35. *Maner.*—A special report on the Maner tombs has been submitted in my letter No. 12, dated the 17th February 1902. There are two tombs at this place, viz., that of Shah Daulat, called the choti dargah, and that of Shaikh Yahya Maneri, called the bari dargah. The former is a very fine building, the best specimen of a mausoleum of the Moghul style in this province. The stone carvings on its walls are of a delicate taste and high finish, and by this it far excels the widely famed mausoleum of Sher Shah at Sasseram (see paragraph 39), which, on the other hand, is of grander and more imposing outlines. Good photographs and drawings of the mausoleum at Maner should be prepared, with a view to publication. The saint died 1017 A.H. (=1608 A.D.); the mausoleum was completed in 1025 A.H. (=1616 A.D.); the mosque inside its compound was built by Ibrahim Khan in 1028 A.H. (=1619 A.D.), while the gateway bears an older inscription, the date of which corresponds to 1603-4 A.D. Ibrahim Khan was then Governor of Bihar. He also built the mosque near the bari dargah of Shaikh Yahya Maneri; the date of its inscription corresponds to 1605-6 A.D. It is at present in a ruinous state, but not worth repairing. The mausoleum of Shah Daulat, the choti dargah, is in very good order and regularly looked after by the Public Works Department. Its gateway is becoming dilapidated and the roof of its mosque had to be supported by wooden beams, as it became unsafe. I did not consider it necessary in my previous communication to recommend any further repairs to it.

Outside these two dargahs I found some other tombs, one with an inscription, the date of which corresponds to 1575-76 A.D. It is in a ruinous state.

#### E.—DISTRICT SHAHABAD.

36. *General remarks.*—In coming to the district of Shahabad from the neighbouring district of Gaya, the traveller is struck with the absence of Buddhist remains, which suddenly seem to disappear, as soon as one crosses the Sone. In fact Buddhism when it flourished in Magadha from 800 to 1200 A.D., does not seem to have extended beyond that river. Wherever, in the district of Shahabad, I found some fragments of ancient statuary collected under the village pipal tree, I hardly anywhere observed Buddhist sculptures among them, and those collections too, are not as frequently met, as in the district of Gaya. There is, however, one very ancient Hindu

temple at Mundesvari in the Bhabua subdivision of the district of Shahabad which, I think, cannot be later than 600 or 700 A.D. It is evidently the oldest and most important building of its kind within this province. The principal other buildings belong to the Muhammadan time, especially the tombs at Sasseram and Chainpur, and the hill forts at Rohtas and Shergarh. The ancient monuments inspected by me in the district of Shahabad, will be dealt with in the following order:—

The temple of Mundesvari;  
The remains at Tilothu and Tutrahi;  
The remains at Sasseram and Chainpur;  
Rohtasgarh;  
Shergarh.

37. *The temple of Mundesvari.*—This temple stands on the top of a hill close to the village of Ramgarh, 7 miles south-west of Bhabuah. It appears to have been a square outside and an octagon inside, covered by a pyramidal roof. The principal entrance was from the east through a door, which originally had a pillared porch in front of which, however, only a few pillars are still standing. There was another door in the western wall, while the northern and southern walls each had one latticed stone window. The northern one is still well preserved, and the carvings around it are of exactly the Gupta style. Their design is very tasteful. The temple was built entirely of stone, and is now in a very ruinous state. Many of the stones have fallen down, and now form a huge pile around the temple. I am afraid, to put it into proper repair, would be a very costly matter, and I have for this reason not yet submitted a special report on it. But I intend doing so later on, as Hindu temples of such a high antiquity are very rare, especially in this province, and as, for this reason, it seems desirable to have the building tested by an experienced architect, who would be able to pronounce an opinion as to what can be done to it, and at what cost. My statement with regard to the age of the temple is based partly on the form of the writing which is found all along the way up to the temple incised on the rocks, evidently pilgrims' records, partly on the style of its carvings, and of various ancient statues found among the debris around the temple. Among the latter I observed a statue of Siva, which still shows the phallic emblem of the god. As I have observed already previously, this is decidedly a sign of antiquity, for, in later periods, this mark was left out in statues of the god. Inside the temple now stand a large Chau-mukhi Mahadeo, and a statue of Durga, both of later date than the temple. Various other remains, partly of brick buildings, are seen all along the eastern slope of the hill, also some rock carvings, apparently of ancient times.

38. *The remains of Tilothu and Tutrahi.*—Tilothu is a large village, half-way between Sasseram and Rohtasgarh, where the two roads from Sasseram and Dehri meet together. Its large Hindu temple is modern and of no interest. Among the numerous Muhammadan mosques and dargahs, which I saw at this place, the oldest is a mosque of the time of Aurangzeb, the date of which corresponds to 1677 A.D. The builders of the mosque are called Golha and Haitam. The mosque is of no special interest. The place is, however, already mentioned in older records, and from the inscription on a tomb at the foot of Rohtasgarh from the beginning of 1638 A.D., we learn that it was a part of the jagir of Ikhtes Khan, who was then the Qiladar or commandant of the Rohtas fort.

Tutrahi is about 5 miles west of Tilothu. It is a place where the neighbouring range of hills forms a knee. Here a small streamlet of water runs down the precipitous cliff, and collects into a pool in front. It is for this reason that the place has become an object of worship. High upon the rocks, on a small natural terrace, a small statue of Mahishamardini has been put up. In an inscription close to it, which apparently refers to the consecration of this image, she is spoken of as Jagaddhatri. This inscription is evidently several centuries later than other records, which are found at the same place, around a crude, rock carved figure of a female deity, and the date of which, as calculated by me, corresponds to Saturday, the 19th April, 1158 A.D. The inscription is one of the Nayaka Pratapadhavala, a local chief of whom we possess other records from Rohtasgarh and the Tara Chandi rock near Sasseram. He appears to have made a pilgrimage to the Tutrahi falls.

accompanied by his whole household, for, besides his own name, he mentions his brother's wife, Sulhi; Tribhuvanadhavala, Somali, Lakshmaditya, and Padmaditya, persons whose rank is not specified; his sons, Satrugna, Viradbana, and Sahasadhavala; five female slaves, called Laduma, Nayakama, Alhi, Puttriki, and Ekali; his treasurer, Doyaraja; his door-keeper, Vimala, and his Court Pandit, Visvarupa, who remarks that he constantly meditates over and praises the goddess.

39. *The remains at Sasseram and Chainpur.*—The most ancient monument at Sasseram is the Asoka inscription which is found inside a small natural cave on the top of Chandan Pir's hill to the east of the modern town. The inscription probably contains a date referred to the death of Buddha; but the passage still remains a great puzzle, and no absolutely convincing interpretation has yet been found. Other versions of the same edict exist at Rupnath in Central India; at Bairat, near Jaipur, and at Siddapur in the Mysore State. The hill where the inscription is incised evidently was an old Buddhist site, which appears to have been appropriated later on by the Muhammadans. They now worship there at the dargah of Chandan Pir, a saint of whose life and history they know absolutely nothing, although they insist upon his being called Shahid, or martyr. A small building close to the dargah was erected by Faqir Muhammad Chaudhuri, a tobacco-seller. Its date corresponds to the 28th January 1804 A. D. A ruined mosque of the time of Jahangir, at the foot of the hill, bears a date which corresponds to 1613 A.D.

The magnificent mausoleum of Sher Shah inside the town, and the other smaller one of his father, Hasan Khan Sur, east of it, are among the most important ancient monuments in this province. When the tomb of Sher Shah was restored some time ago by order of Government, the small cupola, which originally was placed on the top of the big dome, was pulled down and replaced by a pinnacle similar to that on Hasan Khan's tomb. Why this was done, I am not able to understand. It can hardly be called a restoration, and such an example should never be followed in carrying out a work of this kind. It has been proposed to close the doors and windows of both mausoleums by wire-netting, in order to prevent bats from entering, and I recommended this proposal to be sanctioned. When I was at Sasseram, the work had not yet been taken up. On a bright day in the cold weather, bats will hardly enter, as the interior receives too much light to afford a pleasant resort for those animals; but on rainy days they seem to like seeking shelter inside, as I could observe at my subsequent visit to the tomb, when it had been raining heavily for two or three days. The dome of the mausoleum of Sher Shah also seems to be leaking.

No repairs can be done to the unfinished tomb of Islam Shah or Sulim Shah and to the tomb of Alawal Khan. The latter has some fine carving around its principal door. It is said to be a building of Sher Shah's time, but this seems doubtful. The Idgah near Sher Shah's tomb, was built by Mojahid Khan in the time of Shah Jahan. The dates of its four inscriptions cover the period from the middle of 1633 to the middle of 1636 A. D. It seems very unlikely that it has taken such a long time to complete a small building of this kind, and I do not understand the difference between the four dates. There is also at Sasseram an ancient private house called Nawab's Garh, which is now in a very ruinous state, and a Turkish Bath, which may be old as local tradition asserts. Other buildings there are modern, and call for no remarks.

At Chainpur, the principal monument is the mausoleum of Bakhtiyar Khan. As I shall later on submit a special report on this tomb, I need here only say that it is an exact counterpart of the mausoleum of Hasan Khan at Sasseram, but of larger dimensions, and with a small cupola, instead of a pinnacle, on the top of its great dome. It is just on the verge of falling into ruins, and, if repairs are not done to it now, it will soon become destroyed. I consider these repairs worth undertaking, as it is the finest specimen of its kind, together with the tombs of Sher Shah and Hasan Khan at Sasseram. Many similar tombs of smaller size are seen all around Chainpur, but I need not go into details with regard to them. The fort at Chainpur is evidently a building of the time of Sher Shah or Akbar, as seen by the style of its principal gate, the only portion of it that is still fairly intact. Inside the fort, there is a small Hindu shrine where a piece of stone is worshipped as Hamsa Brahma. I was told that it represents a holy man who, after death, had become a Brahma.

I have nowhere else met with this curious form of worship. The Juma mosque at Chainpur has an inscription the date of which corresponds to 1668-69 A.D. It is a building of no special interest, but looked upon with great veneration by the Muhammadans of the place, who are either too poor or unwilling to keep it in proper order.

40. *Rohtasgarh*.—The extensive remains of the hill fort at Rohtas are a very interesting specimen of this kind, and together with the similar ones at Shergharh, which will be dealt with in the next paragraph, they are decidedly unique in this province. No good photographs and drawings of the remains at both places exist, and it would be worth the while to prepare such with a view to publication. The principal remains are generally in a good state of repairs and regularly looked after. Some of the tombs, however, as also portions of the walls and fortifications will in course of time fall down entirely, and it partly seems impossible to prevent this, and partly the monuments are not of such a great value as to make it desirable to spend large sums of money upon them. There is, however, one private house of an officer of some standing close to the palace, which is still buried within jungle. It is the only building of this kind at Rohtas, and for this reason of some interest. It is a two-storied house with an open verandah, the roof of which was originally supported by pillars, but it has now fallen down. All that needs be done to it is to keep the place clear of jungle, to make the house easier accessible. The elephant gate of the place bears an inscription both in Sanskrit and Persian referring to the completion of the gate. The dates of both are identical, that of the Sanskrit portion corresponding to the 14th March 1597 A.D., and that of the Persian part to the 16th of the same month and year. When Blochmann translated the Persian inscription, he was misled by the word *Alif*, which follows the Persian text, and referred the date to the *Alfi* era, which would put it back to a later time. But the Sanskrit inscription clearly shows that the Persian date refers to the *Hijri* era. The inscription mentions the *Purohit* Sridhar; the *darogha* Bai Bhadr, a Brahman; and the architect *Ustad* Mubarak. We meet the same persons again in an inscription over the *Kathan-tiya* gate, the date of which corresponds to the 28th February 1607 A.D. Besides we find here mentioned *Gopal Das Chauhan*, who, with Sridhar, held the office of *Shiqdar*. This inscription also has a Sanskrit portion, but it is written in very small letters and put up very high, so that I was unable to read it, and I had no ladder with me at the time of my visit. The same unfortunately was the case with another inscription over the central arch of the *Alamgiri* mosque, which stands on the road from the palace to the *Lal Darwaza*. I think, however, I could read the date 950 *Hijra* era, and the name of *Sher Shah*. Also the words *Sultan-as-Salatin* seemed certain to me, and this shows that the king cannot have been a *Moghul* Emperor, as the title *Sultan* was never borne by them. The style of the mosque agrees very well with its supposed erection by *Sher Shah*. It is in a fair state of repairs, and worth being kept in order. There is only one other mosque close to the tombs, which was built by *Habsh Khan*, evidently a eunuch. Its inscriptions, which now lies inside the palace, bear a date corresponding to 1580 A.D. Tombs abound, but only one is inscribed, while on four others I noticed the vacant space for the reception of the inscribed tablet, which has been lost. The date of the inscription corresponds to 1578 A.D., and it tells us that it is the tomb of *Shafi Sultan*, who died suddenly, when he was just expecting to be promoted to the rank of *Khan*. It has the finest specimen of stucco ornamentation on its back wall. Another large domed tomb closely resembles that of *Hasan Khan* at *Sasseram*. It is evidently the tomb of the *darogha* of *Sher Shah* mentioned by *Buchanan*. The tomb of *Shafi Sultan*, as others too, is remarkable for this reason that it is covered by a dome, supported on pillars. Similar structures are called *Chattris* in *Rajputana*, where they are frequently met with. Evidently they are an importation from this country, due perhaps to the fact that the garrison of the fort largely recruited from there. I have also observed similar tombs near *Chainpur*, but they are by no means frequent in *Bihar*, and never found in *Bengal*. Another importation from the North-West appears to be the octagonal open pillared hall, covered by a hemispherical dome, which stands in front of some of the *Rohtas* temples. It is common in *Rajputana* and thereabout, but rare in *Bihar*. Of one of



the best temples of this class, which stands on the way to Rajghat, the porch has broken down, and is now lying in front of the temple. It would probably be very costly to put it up again. The two small temples in the south-eastern corner of the plateau, one of which is called by Buchanan the Chauri of Rohtas, are fine specimens of their kind, especially the small pillared hall, covered by five domes.

At the foot of the plateau there is a large tomb which consists of an oblong compound wall, the west side of which has inside a raised stone terrace and three prayer niches. The gate is in the northern wall. Inside are seven stone sarcophagi, standing on a stone platform. A tomb of this kind is called a Chardiwarrah or 'four-walled enclosure.' Over the gate is a long Persian inscription, which tells us that the tomb was built for himself and his family by Malik Wisal, the Darogah of the Rohtas Fort, in the time of Shah Jahan, when Ikhlas Khan was the Qiladar or commandant of the fort, with the rank of a commander of 3,000. It also mentions a number of parganas, which formed the jagir of Ikhlas Khan, among which we find the well-known names of Tilothu, Akbarpur, and Bilaunja, which are all close to Rohtasgarh. The tomb was begun on the 8th September 1636 A.D., and completed between the 17th January and 15th February 1638 A.D.

41. *Shergarh*.—This hill fort, according to Buchanan, was built by Sher Shah, after he had already begun fortifying the Rohtas hill, as the place seemed more favourable to him. It is covered with jungle and never seems to have been looked after. The ground around the palace, which is an interesting building, at least should be cleared. This must needs be done before measurements can be taken in order to prepare plans and drawings, which, I think, is desirable to undertake. Not even a complete and accurate account of the buildings there exists. My notes, which I took down on the spot, will enable me to add considerably to the meagre account in the List of Ancient Monuments in Bengal, if I should be called upon to prepare a revised edition of the same. I do not, however, intend here to enter into a lengthy description of details, but I shall merely mention such points as seem to me remarkable.

The plateau of Shergarh is much lower than Rohtas hill. It may be four miles in circumference. It consists of two elevations, divided by a depression of the ground, where there is a large tank. The palace or Qilah stands upon the highest of southern elevation. All along the edge of the plateau runs a stone wall with several bastions and fortified ghats exactly as that at Rohtas. The entrance to the palace leads through three strongly fortified gates. The palace, which is the principal building at Shergarh, consists of two square open courtyards, surrounded by four open galleries, which are supported by pillars in front, with only a few closed rooms. Owing to the peculiar shape of the ground, the southern courtyard is much higher than the northern one, and of the latter again the northern gallery is lower than the other three. Thus, standing on the roof of one of the galleries around the southern courtyard, one could overlook the entire northern courtyard, while a person standing on the roof of the galleries around the northern courtyard, could observe nothing that was going on in the southern compound. The people now believe that this arrangement was made because the northern court was occupied by the ladies of the *zanana*. They could thus easily be watched by the men, while they were prohibited from looking into the male compartments. Some of the carvings on the pillars, supporting the galleries, are of a high order and much better than anything of the same kind at Rohtas.

Another remarkable feature are the many underground rooms inside the palace. I observed five, but others seem to exist, which are now inaccessible. Most of them were dark, and received no light from above. They may have been used as store-rooms; one was used as a water-reservoir. One room was well lighted by means of skylight. It is in the northern courtyard, the supposed *zanana*, and may have been intended as a place of retreat for the ladies in time of a siege or during the heat of the day. Before entering the palace gates one meets two open pillared halls, which are said to have been used as *Diwan khana*, or offices. I found only one mosque there, which is close to one of the gates leading into the palace. No temples are there, and the absence of any tombs is very remarkable. I was at first inclined to look upon this as a sign that the fort had been occupied for a short period



only, but it seems possible that some of the heaps of stones which are scattered all around the plateau may be the remains of tombs. I found absolutely no inscriptions. Altogether the place is deserving of being better looked after than at present.

#### F.—DISTRICT BIRBHUM

42. *The temples at Bakreswar.*—A special report on this place has already been submitted in my letter No. 13, dated the 18th February 1902. The place owes its sanctity to some hot, sulphuric springs, which here, as elsewhere in India, are looked upon as manifestations of some divine power. Around those springs, quite a small city of temples, enshrining lingas, has sprung into existence. The temples are generally very small; but one large temple stands in the centre, which has received some bad cracks, which will now be repaired at the cost of the Sebaits. All the temples seem to be comparatively modern, and the dates, Saka years 1677 and 1683, corresponding to A.D. 1755 and 1761, which I found in two Bengali inscriptions on tiles, may well represent the age of establishment. Altogether the place is of not more than local interest.

#### G.—DISTRICT HOOGHLY.

43. *The remains at Tribeni and Pandua.*—The remains at these places consist of the dargah of Zafar Khan Ghazi at Tribeni with an old mosque close to it, and of the Minar and large mosque, and the dargah of Shah Sufi Sultan at Pandua; the latter also has an old mosque standing close to it. I have submitted a special report on these remains in my letter No. 18, dated the 19th February 1902. My proposals as to the repairs of these buildings principally concern the Minar at Pandua. The fifth storey of this tower, together with the pinnacle, has fallen down, and I have suggested to restore it, as the monument, though not very tasteful in its outlines, certainly is unique in this province. An ancient lithograph, which still shows the building complete, will enable the Engineer in charge to do this with accuracy. The Minar is evidently an imitation of the famous Qutub Minar in Delhi. Its accurate date, as well as that of the mosque close to which it stands, is not known, but it may well belong to the time of the Muhammadan conquest of the place, which occurred about 1300 A.D. Close to the dargah of Sufi Sultan, which is an insignificant, modernized building stand two mosques, one built in the time of Shamsuddin Yusuf Shah in 1477 A.D., and the other built by Fath Khan, an Afghan of the Sur clan, in 1727-28 A.D. I have suggested that petty repairs might be done to the old mosque near the dargah of Sufi Sultan and to the big mosque at Pandua, to prevent those parts of them that are still standing from complete destruction.

The mosque at Tribeni is evidently the oldest mosque in Lower Bengal, and I have suggested that it might be kept in proper order. The dargah of Zafar Khan Ghazi is remarkable on account of its showing many ancient Hindu carvings: here, as in Pandua also, the spoils of Hindu temples have largely been made use of as building materials. Inside even some Bengali inscriptions may be observed, such as the killing of Ravana by Rama, the marriage of Sita, Sita's exile and similar ones. Only petty repairs have been suggested by me with regard to this building.

#### H.—DISTRICT PURI.

44. *Remarks on the repairs done to the Black Pagoda at Konarak, the temples at Bhubaneswar, and the caves at Khondaliri.*—I am glad to report that the excavation around the Black Pagoda at Konarak, which was taken up at my suggestion, has greatly improved this important but long neglected monument. As at present sanctioned, it will be carried on up to a line running through the northern and southern doors of the Mandapa, thus the whole front part of the temple compound will be laid open, down to the original level of the ground. When I was there, the northern side of the basement and staircase had been disclosed. It shows three large wheels, and in front of them three horses. The corresponding southern portion will have similar wheels and horses. The temple was thus represented as the chariot of Sun-god, drawn by his seven chargers. Two oblong platforms also had been laid open in the

north-eastern corner of the courtyard, apparently used for bathing the images. The stones, which had become loosened, are carefully collected around the temple and it will later on be possible to put up some of them in their original places. When the work, which is now being done, has been finished, it will be necessary to decide whether the excavation should be carried on further to the southern half of the temple court.

At Bhubaneshwar, the following repairs were carried on at the time of my visit:—

(a) The temple of Meghesvara, which is called by R. L. Mitra the Bhaskaresvara temple, is being repaired. I suggested this on the ground that this temple is unique on account of its style;

(b) The four minor temples in the courtyard of the Brahmesvara temple are being repaired. The temples have to be dismantled and put up again by using partly their own materials, partly others from neighbouring shrines, which it is not intended to preserve;

(c) The Raja-Rani temple is being provided with a stone fencing;

(d) The minor temples near the Muktesvara temple are under repairs, and the tank close to it has been emptied and is being provided with a new stone facing. After the completion of these repairs, the place will look very neat and tidy;

(e) The repairs to the roof over the porch of the Parasuramesvara temple are not yet finished, but they will soon come to an end;

(f) The repairs to the Sahasralinga tank had just begun, and the tank was emptied;

(g) Some repairs were done to the minor temples within the courtyard of the Lingaraj.

If it should be intended to do some further repairs to other temples at Bhubaneshwar, I would suggest that something might be done to the Bhaskaresvara and Yamesvara temples, also to a small temple close to the Vetāḍ-Deul, which is an exact copy of the Parasuramesvara, and to the Ananta Vasudeva temple. These are the finest specimens among those temples, which have not yet received any repairs. Some temples like the Brahmesvara and Muktesvara, have very fine carvings inside, which are now covered with soot. It would be well to clean them.

The repairs done at Khandagiri are as follows:—

(a) The carvings in the Rani Gumpā, Ganesa Gumpā, Ananta Gumpā, and Nava Muni Gumpā have been cleaned, as suggested by me, and this has greatly improved them;

(b) The two elephants, flanking the stairs of the Ganesa Gumpā, are put up in their original position;

(c) The Kāthi Gumpā inscription is being provided with a shade, which, I trust, will help to preserve that, what remains of this important record, which, unfortunately has suffered badly from the effects of sun and rain;

(d) The Tantua Gumpā has been repaired, and the cave below it will also be put in proper order. They are on the northern slope of the Khandagiri peak, where a good deal of the jungle has been cleared;

(e) A modern temple, close to the Nava Muni Gumpā, has been pulled down, as it had become unsafe. The building was of no interest, and its destruction is absolutely no loss.

#### L—DISTRICT KHULNA.

45. *The remains near Bagerhat.*—The remains here consist principally of the dargah of Khanja Ali and the Sat Gumbaz mosque. Khanja Ali is the local form of the name, but in the inscriptions around his tomb, he is merely called Khan Jahan. He is said to have been the cultivator of the Sundarbans. According to the inscriptions on his tomb, he died on the night of the 26th Zil Hijjah 863, that is, the night of the 23rd to 24th October 1459 A.D., and he was buried on the 25th. The tomb is a stone sarcophagus, resting on a double stone terrace. This again stands upon a brick-terrace, which was laid out with glazed tiles, showing various patterns, all in blue and white. They have now become loose, and have been collected around the

stone-terrace. The latter is covered with inscriptions, but they are all merely pious sentences in Arabic and Persian. The only historical inscriptions are those which give us the name Khan Jahan and the date of his death and burial. The sarcophagus stands inside the usual mausoleum, which is covered by a big dome. To the west of this stands another stone sarcophagus, which, as the inscription on it tells us, is the tomb of Muhammad Tahir. The date of his death could not be made out, as the inscription is too much defaced. Further to the west stands a large one-domed mosque, and another mosque, with nine domes, stands on the western borders of the tank, close to dargah. This tank swarms with alligators, who are regularly fed by the Khadims of the place. I myself watched the men standing on the steps of a ghat and calling out for an alligator to come, when, after some three minutes, he slowly approached the steps of the ghat, where he lay down lazily, and, after some hesitation, swallowed a small fowl, which was held in preparation for our visitor. Wherever, in Bengal, a holy Pir resided, he is said to have been on friendly terms with the alligators and crocodiles, living in the tank close to his place.

The dargah is in fair order, not so the mosques, but it is not worth the while spending much money upon them.

There are many other ruined mosques on the way to Sat Gumbaz, which is about one mile distant from the dargah. It is a large oblong building, covered by 77 domes, with one tower in each corner. The central transept has seven vaults instead of the usual domes. The eastern wall has eleven arched entrances, and the northern and southern ones have each seven. The western wall has ten prayer niches, a small door being let through the place to the right of the central niche, instead of adding an eleventh niche there. It is evidently a mosque, although local tradition asserts that it was used by Khanja Ali as his durbar hall. This is very incredible. No inscriptions tell us its date, but little doubt remains that it is a building of Khanja Ali, to whom this whole land belonged. Out of the 77 domes, 21 are more or less damaged, and there are also cracks in the walls. It would be well if some minor repairs could be done to it, for, although defective in taste, it is a peculiar structure, which should not be allowed to fall into utter ruins.

#### K.—DISTRICT DACCA.

46. *General remarks.*—Before visiting the district of Dacca I expected to find there some good specimens of the Bengali-Muhammadian style of architecture, but I was very much disappointed in this regard. In fact, having seen almost all the existing remains of this style, I have come to the conclusion that nothing can compare with the buildings at Gaur and Pandua, in the district of Malda. They are by far the best, and all other monuments of the same class are nothing but inferior copies. The remains at Dacca will be dealt with in the order as follows:—

- Remains at and near Dacca.
- Remains near Narainganj.
- Ancient Sonargaon.
- Remains in the Munshiganj subdivision.

47. *Remains at and near Dacca.*—No Hindu remains of any importance exist at Dacca. The far-famed temple of Dhakesvari is a modern structure of no interest. Other temples, mentioned in the List of Ancient Monuments in Bengal, are still inferior to it.

The principal Muhammadian remains are the Lalbagh Fort, of which still a good deal is standing, but in a ruinous condition, and it seems impossible to do anything to it. Within the enclosure of this fort stands the mausoleum of Bibi Peri, the daughter of Shaista Khan, which, though defective in its outlines, is not without some taste inside. It is laid out with white and black marble, and kept in fairly good order. I found here an inscription in Persian verses of Ruknuddin Barbak Shah of Bengal, which is the first known inscription of a Bengal Sultan, composed entirely in Persian poetry. Nobody seemed to know where it came from. The great and small Katra are in a ruinous state and of little interest. The Husaini Dalan is an absolutely modern building, now used during the Muharram festival. A small inscription in its walls tells us that the original

building was erected in 1643-44 A.D. by Sayyid Murad, when Azim-ush-Shan was Governor of Dacca. Close to it are the tombs of four of the modern Nawabs of Dacca. Three older tombstones are now placed into the walls of the Husaini Dalan; they belonged to the tombs of Mir Fayyaz, who died in 1719 A.D., Aga Muhammad, who died in 1730 A.D., and Ashur Beg, who died in 1818 A.D. The tombs in the Shabbag at Ramna are of no interest at all. Close to it are some old ruined mosques. The Sat Gomul mosque near Mirpur, which is locally called merely the Sat Masjid, is remarkable for this only, that it has in each corner a two-storied domed pavilion with open windows. The mosque is still in use, and kept in good order. Many other ruined mosques are close to it. The dargah of Shah Ali Sahib is some two miles distant from the Sat Masjid. An inscription in Persian verses tells us the history of the place. The original building was erected in 1480-81 A.D., but in 1577-78 A.D., it had already fallen into decay. Shortly afterwards, Shah Ali came from Baghdad to India, and finally settled at this place, where he shut himself up from all intercourse with the outer world. After his death, a mausoleum was built over his tomb, and this was again repaired in 1806 A.D., at the instance of Nawab Nasir Mulk. From an older inscription at the same place, we learn that the original building was a mosque, erected 1480-81 A.D., in the time of Yusuf Shah. The dargah is in very fair order, and the late Nawab of Dacca has built a rest house for pilgrims close to it, and provided it with a road to make the place easier accessible.

48. *Remains near Narainganj.*—The fort at Hajiganj consists of a low enclosure wall of irregular shape, with several bastions, and a gateway to the north. No traces of ancient buildings are found inside. At a little distance from it, I found an old mosque of the Bengali style, which is still in use. Opposite Narainganj, at Nabiganj, is the Qadam Rasul. All the buildings at this place are modern, but they stand on the foundations of older ones. From inscriptions we learn that the mosque at this place was built in 1786 A.D., while the lofty gateway, which now leads into the enclosure, was erected 19 years later. The foot-print is kept inside a small house. It is a piece of black stone, showing the rude impression of a human foot, of natural size. In fact, all the foot-prints of this kind, which I have seen, are of natural size, in opposition to those worshipped by Hindus and Buddhists, which grow larger and larger, the later they are. An inscription from the tomb of one Amanat Khan, which is now put up near the gateway, is older than the present buildings. It tells us that Amanat Khan was buried near the holy shrine, containing the Prophet's footprints, in 1742 A.D.

49. *Ancient Sonargaon.*—This once important town, famous for its fine muslins, and for some time the capital of Eastern Bengal, has fallen into utter ruins, and very little has remained of it. The places described by Dr. J. Wise in his well-known account of Sonargaon, are scarcely worth being mentioned, and I shall not enter into any details with regard to them. The only important remain is the tomb of the Bengal Sultan Ghiyasuddin Azam Shah, near the modern village of Mograpara. It is true that only tradition points to it as the burial place of this Sultan, but I see no reason to doubt this. Another tradition tells us that he died from cholera at Atia, in the Tangail subdivision of the district of Mymensingh, on his way back to Sonargaon, and that he was buried on the spot; but this tradition deserves no credit whatever. So also does a third one which says that he lies interred in the Eklakhi mausoleum at Pandua, in the district of Malda. The tomb at Sonargaon consists of a plain basalt sarcophagus, standing on a terraced platform, of the same material. The stones now have sunk, and have become dislocated, but they can easily be put in proper order again. I shall later on submit a special report on the repairs which I consider it desirable to do to it. Close to it is seen another brick tomb, of no interest however.

50. *Remains in the Munshiganj Subdivision.*—The fort at Munshiganj is a building of the same kind, as that at Hajiganj (see paragraph 48). The tomb of Baba Adam at Rampal is a plain brick sarcophagus, standing inside a small enclosure, surrounded by brick walls. Close to it is an old mosque built in the time of Fath Shah. The date of its inscription corresponds to August 1483 A.D. The mosque is in a ruinous state, but I cannot recommend spending much money on its repairs. Of the old place of Bikrampur, called the

Ballalbari, or Rajbari, only traces of the walls and ditches may be seen; there are no structural remains of any importance inside this enclosure. The Ballali bridge near Mirkadim has received some repairs from time to time and seems to be in fair order. At Rikabi Bazar, there is an old mosque of the Bengal style, of no special importance.

The Rajabari Math, 11 miles south of Munshiganj, is the most interesting ancient monument in this subdivision. It was erected by Chand Roy and Kedar Roy over the funeral pyre of their mother, and had been repaired in 1896 at the cost of Raja Srinath Roy, of Bhagyakul. It is a high tower, like a Hindu temple, built of bricks with ornamental designs in its outer surface. Among those the absence of any human or animal figures is remarkable in a Hindu monument of this kind. The statement that it was erected over the funeral pyre of the mother of Chand Roy and Kedar Roy, is based upon the modern inscription, which was put up over its door, when it was repaired in 1896. Another tradition says that it was a temple, enshrining a Mahadeo. Chand Roy and Kedar Roy were contemporaries of Akbar, and belonged to the Barah Bhuiyas, those independent chiefs who ruled over Eastern Bengal before it became annexed to the Moghul Empire.

#### L.—DISTRICT MYMENSINGH.

51. *The Atia ruins.*—As I have already in my letter No. 37, dated the 29th April 1902, submitted a detailed account of the ruins at Atia in the Tangail subdivision of the district of Mymensingh, I need here only repeat the principal facts. The big mosque at Atia was built by Said Khan, the son of Bayazid Khan, an Afghan of the Pani clan, in the time of Jahangir. The date of its inscription corresponds to 1609-10 A.D. When it had fallen into ruins, some person began to build another smaller mosque close to it. But as soon as Raushan Khatun Chaudhurani came to hear of this, she decided upon restoring the old mosque, and the second smaller mosque accordingly never was finished and has never been used. The inscription on the tomb of Shahinshah Baba Adam Kashmiri tells us that he died on the 14th October, 1507 A.D. He is called merely Baba Kashmir in this record, which, however, must be a mistake for Baba Kashmiri, as it is an impossible form. Close to it stands an old mosque of the Bengali style, which, according to the local tradition, was built by Ghiyasuddin Azam Shah. A ruined brick tomb in front of this mosque is pointed out as the burial place of this Sultan, a tradition, which, as I have already remarked in paragraph (49) of this report, deserves no credit whatever.

The buildings at Atia are from time to time repaired at the cost of the Dilduar and Karotiya zamindars, the owners of the land, but they might be called upon to do some further repairs to the big mosque, portions of which are at present in a bad state.

#### PART III.—NOTES ON ANCIENT REMAINS INSPECTED BY BABU P. C. MUKERJEE.

52. *General remarks.*—Up to November 1901 the Babu travelled in the Patna Division. He then went to Bhagalpur, and hereafter visited various places in the Burdwan Division and in the district of Balasore. On the 13th March 1902 he joined the office of the Director-General of Archaeology in India. As his tours brought him to many places which have later on been visited by myself and which have been described in Part II of this report, I shall here merely give some notes on such places as I have not yet seen myself. They are extracted from a final report which the Babu submitted to me on the work done by him during the last year. The discovery by him of a new inscription at Gaya has already been referred to previously.

53. *Bawangarh, Tilkevar, and Kalthua Hill.*—Bawangarh is a place in the north of the district of Champaran. Extensive lines of earthen walls are seen here running parallel to each other and covering the sites of several villages. The citadel itself at Rajpur Soreri is of a rectangular form. Remains of houses and wells, both of brick and stone construction, are found here. At Tilkevar, in the district of Darbhanga, the Babu found three Sanskrit inscriptions, the characters of which resemble the modern Bengali script. The remains on the Kalthua hill, in the district of Hazaribagh, are almost exclusively

Jain sculptures; but there exists a temple with an image of Mahismardini, which is now worshipped under the name of Kulesvari. The Babu found no Buddhist remains there.

54. *District Bhagalpur.*—At Barari the entrance of one cave is blocked by the gate falling, while that of the other is almost choked up for the same reason. At Kahalgao and Patharghata the rock sculptures, temples, and caves should be cleared of rank growth, trees, and rubbish and regularly be looked after. At Sultanganj the materials of the monastery were excavated and removed, while the coating of the stupa is peeling off. The rock sculptures on the Jahngira island require to be looked after.

55. *Barakar, Khattragarh, Bankura, Vishnupur, and Garbhata.*—These places are all in the Bardwan Division. The four stone temples at Barakar are not in a bad condition, but the trees should be uprooted. One of them has an inscription in an ancient form of Bengali. At Khattragarh is a mediæval temple, but it is reported to be of no interest. The stone temple of Ektesvar, near Bankura, is in a dilapidated condition. The temples at Vishnupur are said to range from 900 to about 1750 A.D. Nearly all the temples possess inscriptions with dates and the names of their builders. The brick temples exhibit elaborate ornamentations and reliefs, chiefly scenes from the life of Krishna. The only temple of note at Garbhata is that known as Sarva-Mangala. It is built of laterite in the Orissan style, and is in good condition.

56. *District Balasore.*—The principal remains at Balasore are the old Dutch and English tombs, which are in good order. The Qadam Rasul and Juma Mosque, built by Taki Khan during the reign of Aurangzeb, are maintained by the local Muhammadans. There are some ancient Buddhist statues lying in the Municipal compound. Hindu temples, generally built of laterite, in the Orissan style, are reported from several places. The most interesting part of the temple at Karnagarh is the three-storied western gate called Jogi Gopha. The temple at Danton is known by the name of Shyamalesvara. The Sahasralinga temple at Shastini is reported to be in a very dilapidated state, while the temples at Kupari are said to be beyond the possibility of conservation. Ruined forts with laterite walls are reported from the following places:—

Gope, Rai-Baniagarh (ascribed to an ancestor of the Raja of Mourbhanj), Chandrasekhargarh, and Dolgram.

57. *Satgaon and Bansbaria.*—These places lie in the district of Hooghly. The three domes of the mosque at Satgaon have fallen in, and the whole is covered with jungle. The Hansesvari Temple at Bansbaria is of the mixed Benares style, and covered with thirteen cupolas. There is a second temple with brick ornamentation, of the style of the Vishnupur temples.

T. BLOCH,

*Archæological Surveyor, Bengal Circle.*

REPORT ON THE ADMINISTRATION OF THE SALT DEPARTMENT  
DURING THE YEAR 1901-1902.

The 6th September 1902.—The following extracts from the Report of the Board of Revenue on the administration of the Salt Department in the Lower Provinces during the year 1901-1902, are published for general information.

E. W. COLLIN,

Offg. Secy. to the Govt. of Bengal.

No. 951B, dated Calcutta, the 8th August 1902.

From—H. WHEELER, Esq., Secretary to the Board of Revenue, L. P.,  
To—The Secretary to the Government of Bengal, Financial Dept.

I AM directed by the Board of Revenue to submit the following Report on the administration of the Salt Department during the year 1901-1902.

THE HON'BLE MR. ROYDILLON, C.S.I.

## CHAPTER I.—PRELIMINARY.

3. The Indian Salt Act, XII of 1882, continued to be the salt law in force in Orissa. Outside that area in the districts of the 24 Parganas, Khulna, Midnapore, Howrah, Backergunge, Noakhali, and Chittagong that Act, and Act VII (B.C.) of 1894, remained concurrently in force.

4. In January 1902, the district of Howrah, which, with Noakhali, had been brought within the scope of preventive operations in March 1901, was added to the charge of the Assistant Commissioner of Salt. No active measures have as yet been taken in Noakhali, but inquiries will shortly be made with a view to operations being started.

In accordance with the Government of India's order No. 3525S.R., dated the 14th July 1900, the saltpetre refineries in Calcutta and its environs were brought under the control of the Commissioner of Excise and Salt, Bengal, with effect from the 1st July 1901, the Assistant Commissioner (Mr. S. G. L. Platts) taking charge of them from the Assistant Commissioner of the Lower Division, Northern India Salt Department, on that date.

In Khulna, preventive operations, which in the previous year had been confined to the Kaliganj thana, were extended to thanas Aasuni, Paikgacha and Baitaghata. In Chittagong, three Sub-Inspectors' ranges covering the salt areas of the district, with head-quarters at Sitakund, Cox's Bazar, and Teknaf, were formed with effect from October 1901, and the salt staff was reinforced by the addition of three Sub-Inspectors, four petty officers, and 26 peons from Orissa.

## CHAPTER II.—STOCK, IMPORTS, MANUFACTURES, AND CLEARANCES.

7. The stocks, imports, clearances, &c., for the years 1899-1900 to 1901-1902 are shown below:—

STOCKS, IMPORTS, &c.	1899-1900.	1900-1901.	1901-1902.
Total of all stocks at the commencement of the year.	Mds. 32,62,652	Mds. 31,54,855	Mds. 13,09,668
Total quantity imported or manufactured during the year.	1,07,81,024	89,38,305	1,33,89,363(a)
Total ...	1,40,43,676	1,20,88,160	1,46,99,031
Quantity on which duty was paid during the year.	1,07,72,858	1,06,20,120	1,09,68,475(b)
Quantity which passed free of duty for manufacture of glazed stoneware.	1,760	4,168	1,439(c)
Quantity written off during the year for wastage or otherwise.	1,14,203	1,54,204	1,20,163
Total ...	1,08,88,821	1,07,78,492	1,10,80,067
Balance at the close of the year ...	31,54,855	13,09,668	36,18,964

(a) Includes 374 maunds found in excess in sales and 108 maunds surplus from bond.

(b) Includes 6,40,556 maunds of Bombay and Madras salt passed free of duty.

(c) Includes 210 maunds used for gift's charge.

At the commencement of the year stocks had fallen abnormally low; the quantity of salt in all the *golas*, both public and private, amounted to a little over 13 lakhs of maunds only, or nearly 18½ lakhs of maunds less than in the preceding year. The importations during the year were, however, unusually large, and totalled nearly one crore and 34 lakhs of maunds. Since the year 1898-99 there has been no local manufacture of salt. The sales amounted to over one crore and 9½ lakhs of maunds, and after allowing for wastage, the closing balance stood at 86,18,964 maunds. In addition, at the close of the year, there were 2,06,049 maunds of salt lying afloat in ships in the port of Calcutta ready to be sold direct to purchasers, against 1,63,267 maunds at the close of 1900-1901. At Chittagong 57,169 maunds of salt were lying afloat for discharge into bond at the close of the year.

The Collector of Customs, Calcutta, reports that the importations for the year and the quantity bonded were the highest on record. The increase in the importations was due to freight being cheap and plentiful in comparison with the previous year. Steamers have almost entirely superseded sailing ships in the general trade of Calcutta and in the salt trade in particular, and as it is always necessary for a steamer to obtain a quick despatch, a very large proportion of the salt imported was delivered into bond. In consequence, the accommodation at both the Sulkea and Kidderpore *golas* was rapidly filled up, and much difficulty was experienced in providing the bonding space required by the trade. The Board are satisfied that increased space for storage is needed at Sulkea, and proposals to that effect have been submitted.

8. \* \* \* \* \* The importations into Calcutta advanced during the year by 49·5 per cent. The major portion still comes from the United Kingdom, though its former more extensive monopoly is being encroached upon by other competitors. The imports from Aden and the Red Sea are increasing rapidly, and as these salts do not have to pay the Canal dues, they compete on favourable terms with salt imported from Europe. Salt was imported for the first time from Port Said, of similar quality to the *karkatch* salts from Aden and the Red Sea, but as the steamers importing it have to pay the Canal dues, the Collector of Customs doubts whether it will be able to compete with the other *karkatch* salts.

Taken in conjunction with the large increase during the year in the operations at the Sulkea and Kidderpore *golas*, which is noticed below, it is obvious that the larger importations involved a considerable addition to the work of the Preventive Salt establishments in Calcutta. The Collector of Customs reports that salt was discharged from shipboard into bond on no less than 269 nights during the year, and this alone entailed much extra labour. As much as 700,000 tons of salt were weighed under official supervision—475,000 tons on boardship, and 225,000 tons at the *golas*. The low rate of wastage and the results of check re-weighments testified generally to the accuracy of the work done.

The importations into Chittagong show an advance of 70 per cent. compared with those in the preceding year. No reason has been assigned for this increase, but it is believed that, as in Calcutta, it was largely due to freight being easily and cheaply procurable.

9. \* \* \* \* \* The total quantity of imported salt sold increased by 1·4 per cent. Of this 32 per cent. was sold from shipboard and 68 per cent. from bond. The corresponding proportions in the preceding year were 27 and 73 per cent. In Calcutta although sales from the importing vessel direct increased by 18·9 per cent., there was a decrease of 10 per cent. in the sales from bond. The increase in the total sales at Narayanganj and Jhalakati is noticeable, amounting to as much as 18 and 71 per cent., respectively.

10. The following figures show the total turn-over at the Sulkea and Kidderpore Dock *golas* for the past five years:—

				Mds.
1897-98	...	...	...	1,03,91,078
1898-99	...	...	...	1,08,84,957
1899-1900	...	...	...	1,13,87,469
1900-1901	...	...	...	1,21,04,343
1901-1902	...	...	...	1,49,62,131



The figures for the past year were the highest ever recorded. The total turn-over at the *Sulkea golas* was 99,70,762 maunds against 81,09,104 maunds in the preceding year. At the *Dook golas* it was 49,81,369 maunds against 39,95,239 maunds. The increase in the work which these figures connote has already been referred to.

11. Licenses were issued for three additional private warehouses during the year. \* \* \* \* \* Twenty-one warehouses in all were open at the close of the year.

The quantity of salt despatched to these inland bonded warehouses from shipboard and from bond in Calcutta amounted to 13,53,091 maunds, as compared with 10,43,871 maunds in 1900-1901, an increase of over 29 per cent. The preceding year had shown an increase of 25 per cent. as compared with 1899-1900, and it would seem that this branch of the salt trade is steadily and rapidly growing in popularity. The quantity of non-duty-paid salt removed during the year from shipboard at Chittagong for clearance at Narayanganj shows an increase of 3,505 maunds, or over 25 per cent., as compared with the preceding year, but this was far from compensating for the very large falling off during 1900-1901.

13. The following statement shows the proportion of duty-paid salt conveyed by the various means of transport from Calcutta inland, as well as to Orissa, during the past two years:—

Period.	By boats.	By steamers and flats.	By rail.	Total despatch.
	Mds.	Mds.	Mds.	Mds.
1900-1901	26,17,561	12,68,554	55,23,274	93,49,389
1901-1902	24,87,009	10,56,190	64,41,580	99,94,779
	-1,30,552	-1,42,364	+9,18,306	+6,45,390

The quantity carried by boat decreased by 4·9 per cent., and that sent by steamers by 11·7 per cent. The quantity conveyed by rail, however, increased by 16·62 per cent. Of the aggregate quantity despatched from Calcutta, 24·3 per cent. was conveyed by boats, 10·8 per cent. by steamers and flats, and 64·4 per cent. by rail, as against 27·9, 12·9, and 59·07, respectively, during the preceding year. It would appear that the railways are steadily attracting the traffic to the detriment of other means of transport. The opening of a pass station at Shalimar in February 1902, since when it is possible to convey salt to Orissa by the Bengal-Nagpur Railway, will increase this tendency.

14. There was no manufacture of salt during the year on the Chilka Lake in Orissa. The total quantity of salt in hand at the Tua and Gurubai factories at the beginning of the year was 3,16,944 maunds, inclusive of a wastage of 2,530 maunds remaining to be written off at the close of the previous year. To this have to be added 54 maunds of salt found in excess in a heap at the Gurubai factory, making the total stock 3,16,998 maunds. Of this quantity, 2,25,114 maunds were sold (1,31,654 maunds for consumption in Puri, 91,968 maunds in Cuttack, and 1,494 maunds outside the Province), against 84,687 maunds in the previous year; 21,320 maunds were written off as wastage, leaving a balance of 70,562 maunds at the close of the year. Deducting from this balance a further wastage of 13,017 maunds, which remained to be written off, the actual balance stood at 57,545 maunds. This was finally disposed of by the 23rd May 1902. The largely increased sales were due to the reduction of the wholesale price to half-an-anna a maund, which was done with the object of effecting an early clearance of the stocks in hand. It will be seen that this result was achieved within a far shorter period than was anticipated in the report of the preceding year.

Imports of Madras salt into Orissa.

15. The imports of Madras *karkatch* and refined salt into Orissa from the different factories,

as shown on the margin, amounted to 6,90,989 maunds, against 6,92,918 maunds in the preceding year, showing a decrease of 1,929 maunds, or .2 per cent. The factories at Burla and Karasa showed an aggregate increase of 1,80,270 maunds, while those at Ganjam, Naupada, Jagannaikpur, Cocanada,

Name of factory from which the salt was imported.	Quantity imported in—		Increase.	Decrease.
	1900-1901.	1901-1902.		
	1. Mds.	1. Mds.	1. Mds.	1. Mds.
Ganjam	5,10,900	2,04,777		1,06,123
Naupada	1,64,406	1,57,961		13,070
Burla	15,159	1,69,140	1,80,617	
Karasa	9,364	30,648	31,358	
Jagannaikpur	31,073	9,678		16,084
Other factories in Cocanada and other places.	1,68,875	1,40,686		20,000
Total	6,92,918	6,90,039	1,80,270	1,62,199

Net decrease ... 1,929 mds.

and other places exhibited a total decline of 1,62,199 maunds, resulting in a net decrease of 1,929 maunds.

The result is, perhaps, due to circumstances of temporary application only. The imports into the districts of Cuttack and Balasore showed an aggregated advance of 1,03,815 maunds, and it was the decrease of 1,05,744 maunds imported into Puri and the Tributary Mahals, which more than counterbalanced what would otherwise have been a large increase. In Cuttack it is said that foreign-imported salt has been driven from the market, and the results in Puri are mainly due to the abnormally low price at which the old stocks of Lake salt were offered to the public. The decrease in the Tributary Mahals is not easily accounted for. The Commissioner of Salt suggests that a portion of the increased supplies to the district of Cuttack found their way into the Tributary Mahals; there had also been a large increase in the importations into the latter area during the preceding year, and it is possible that there were old stocks in hand.

### CHAPTER III.—CONSUMPTION AND PRICES.

16. The total quantity of salt which passed into consumption in the entire

Province of Bengal during the year under review was 1,04,31,438 maunds. This is exclusive of

5,45,011 maunds, being the net exports by land, and inclusive of 17,974 maunds deduced from saltpetre. The figures show an increase of 2,03,937 maunds, or 1.9 per cent. Of the total quantity the saliferous tracts (including the whole of Orissa) took 19,54,457 maunds, or about 19 per cent., and the rest of the Province 84,76,981 maunds, or 81 per cent. The consumption per head in the saliferous tracts works out to a little over 6 seers, or 12.34lbs approximately, and in the rest of the Province to 5 seers and 3 chittaks, or 10.67lbs. The figures are, at best, approximate only; in the first place, they assume that the unconsumed stocks of the previous year, which were consumed during that under report, were equal to the balance in hand at the end of the year under review. Again it is assumed that the salt is consumed in the district to which it is registered as despatched. In the saliferous districts in which illicit manufacture is easy, it would certainly have appeared probable that the recorded consumption of licit salt per head of the population would have been less than elsewhere. The figures, however, convey the opposite impression, but it is to be borne in mind that the arrangements for the record of consumption within the salt law limits are more complete than in the districts outside them.

The rates of consumption per head of population in the Bombay and Madras Presidencies for 1901-1902 have not yet been ascertained, but during the preceding year they were 11.88lbs. and 15.84lbs., respectively.

17. \* \* \* \* \* During the year 1900-1901 the reported consumption of salt within salt law limits rose from 8,42,529 to 8,51,271 maunds, and in the year under report it has still further increased by 15,902 maunds.

There was an advance in consumption in all the saliferous districts, with the exception of Howrah and Noakhali, but it was largest in the districts of the 24 Parganas and Chittagong. Judging by the population test, however, the districts of Howrah and Backerganj show the best results and the district of Noakhali the worst.

21. \* \* \* \* \* In most of the districts, as in the previous year, prices advanced during the year under report. The rise in price recorded at in Darjeeling is very marked, and special enquiry will be made as to the reason. Prices ruled lowest at Puri. The average wholesale price for the whole Province was Rs. 3-12-9 per maund, as compared with Rs. 3-11-7 in 1900-1901, showing a rise of one anna and two pies. Except in Pabna and Cuttack, the average price of salt per maund, in the principal provincial bazars, was generally higher than in the preceding year. The average for the twelve marts for which figures are quoted, was Rs. 3-11-9 per maund against Rs. 3-10-4 in 1900-1901, showing an increase of one anna and five pies per maund.

The average wholesale price of Liverpool salt per hundred maunds as sold from the ship's side in the port of Calcutta, exclusive of duty, amounted to Rs. 69-11-5, as compared with Rs. 70-3-1 in 1900-1901, showing a decrease of only seven annas and eight pies. Considering the rise last year from Rs. 62-4-11, the fall is insignificant, and in view of the large importations it might have been expected that prices would have declined still further. It is also noticeable that the extension of the inland bonded warehouse system does not so far appear to have had much effect in cheapening salt in the interior of the province. The selling price of Liverpool salt per hundred maunds, exclusive of duty, which in 1900-1901 varied from Rs. 77-12-4 to Rs. 60-1-10 ranged in the year under report from Rs. 70-5-8 to Rs. 57-4-6.

#### CHAPTER IV.—PREVENTIVE MEASURE.

22. Preventive operations outside Orissa were carried on as before, in the districts of the 24-Parganas, Midnapore, Khulna, Backergunge, and Chittagong. In Midnapore, as already stated, the retention of the temporary staff has been extended for an additional period of three years. The district of Howrah was brought tentatively within the scope of operations, and a small party from the Tamrak circle, in the district of Midnapore, was sent in January 1902, to work in the Syampur and Ulubaria thanas of the Howrah district. The experience of the past two seasons having shown that illicit manufacture does not prevail to any appreciable extent in the district of Backergunge, preventive operations there have been discontinued since the close of the year. The preventive staff has been disbanded, with the exception of the Inspector whom it is proposed to depute to Noakhali to ascertain and report on the steps to be taken and the establishment required, in order to commence preventive operations in that district during the next working season.

23. The number of cases in which salt was attached, released, and confiscated during the year under review were 929, 12, and 908, respectively, as against 1,074, 2, and 968 in the previous year, the corresponding quantities of salt being 684, 646 and 150 maunds against 640 45, and 548 maunds in the year 1900-1901. There was thus an increase of 44 maunds, or 6·8 per cent., in the quantity attached, and a decrease of 898 maunds, or 72·6 per cent., in the quantity confiscated. On an average about 29½ seers of salt were attached and 6½ seers confiscated in each case, as against 24 seers, and 22½ seers, respectively, in 1900-1901.

24. The number of seizures and unsuccessful house-searches during the year under review were 1,491 and 42, respectively, as against 794 and 17 in the previous year. There were no unsuccessful house-searches in the districts of Puri and Khulna, while in the districts of the 24-Parganas, Midnapore, and Chittagong the number of failures was insignificant in comparison with the number of seizures effected. In the districts of Balasore and Cuttack the numbers were 20 and 14, respectively; the owners of the houses are said to have learned of the intended search and to have destroyed all illicit articles. The general percentage of unsuccessful house-searches to seizures exhibits a slight increase, having risen from 2·14 in the previous year to 2·81 in the year under report. In the year 1899-1900, however, it was as much as 4·1.

25. \* \* \* \* \* There were 1,238 prosecutions during the year under review, against 898 in the previous year: out of 1,405 persons arrested and brought to trial, 1,174 were convicted, showing a percentage of 83·6.

Number of cases instituted under Acts VII (B.O.) of 1864 and XII of 1888.

24-Parganas	351
Chittagong	179
Balasore	141
Puri	106

Cases of illicit manufacture of salt (section 9, Act XII of 1882) numbered 953, and were most numerous in the districts marginally noted. The proportion of persons convicted of this offence was 80

per cent. of those brought to trial. In the districts of Chittagong and the 24-Parganas the increase is attributed to greater activity on the part of the salt officers, to the provision of a steam launch in the 24-Parganas, and to the strengthening of the salt force in Chittagong, which was for the first time employed throughout the year. There were no cases of possession of spontaneous or swamp salt during the year. Owing to the failure of the police to attend house searches, about 50 cases in the 24-Parganas and 42 cases in Midnapore are reported to have broken down. To prevent a repetition of these fiascos, the sanction of Government has been obtained to the appointment of nine special police head constables in Midnapore. Similar arrangements in the 24-Parganas are under the consideration of the Salt Commissioner. Salt officers were instrumental in the detection of 39 opium cases also, as compared with 37 in the preceding year. No cases under the Excise Act were reported by them.

#### CHAPTER V.—FINANCIAL RESULTS.

28. \* \* \* \* \* The financial results of the year, as compared with 1900-1901, show an increase of Rs. 5,83,954, or 2·3 per cent. in the receipts and an increase of Rs. 42,099, or 9·02 per cent. in the charges, giving a net revenue of Rs. 2,55,21,299, which is in excess of that obtained during 1900-1901 by Rs. 5,41,855, or 2·2 per cent. The increase in receipts occurs mainly under the two heads of Import and Excise Duties on Salt.

#### CHAPTER VI.—MISCELLANEOUS.

35. The quantity of salt educed in the manufacture of saltpetre and removed from all refineries in the Province on payment of duty during the year, was 17,974 maunds, as compared with 17,584 maunds similarly removed in 1900-1901. The quantity of refined saltpetre produced in the refineries in Calcutta was 50,571 maunds, as compared with 61,924 maunds, and the quantity of salt educed was 5,594 maunds, against 3,496 maunds in 1900-1901. The quantity of salt excised was 2,360 maunds in comparison with 4,740 maunds in the preceding year.

38. In Midnapore there were six cases of assault on Salt officers, one in each of the thanas Khedgree, Contai, Dantan, and Egra, and two in thana Mohisadal. In the case at Nasalla Chak hat, in thana Khedgree, five men were charged under section 147 of the Indian Penal Code, all of whom were convicted, one being fined Rs. 100 and the rest Rs. 60 each. In the case in thana Contai, three men were charged under sections 114 and 353 of the Indian Penal Code, but all were acquitted for want of sufficient evidence. In the case in thana Dantan nine men were sent up under sections 353 and 147 of the Indian Penal Code, all of them being found guilty and sentenced to different terms of imprisonment, while in the two cases in thanas Egra and Mohisadal all the accused, except one, were fined. Another case in the Mohisadal thana is pending trial. \* \* \* \* \* The Commissioner of Salt reports that in all the districts the attitude of the people towards the Department is hostile, but cases of active resistance are becoming scarce in the districts of the 24-Parganas and Chittagong.

## WEATHER AND CROP REPORT.

For the week ending the 15th September 1902.

**Burdwan.**—Rainfall at Sadar 1·83, Kalna 3·52, Katwa 2·06, Raniganj 2·80. Weather fine and hot. Transplantation of *aman* nearly finished. Weeding commenced. Harvesting of *aus* continues. Fodder and water sufficient. Condition of cattle good. Common rice sells at 11 seers per rupee.

**Birbhum.**—Rainfall at Sadar 7·67, Rampur Hat 7·95. Weather cloudy. Rampur Hat subdivisional officer reports that considerable loss to property and some lives have been caused by recent floods. Several villages destroyed. Common rice sells at 12 seers per rupee. Fodder sufficient.

**Bankura.**—Rainfall at Sadar 3·85. Paddy and sugarcane crops doing well. Fodder and water sufficient. Common rice sells at 12 seers per rupee.

**Midnapore.**—Rainfall at Sadar 1·33, Contai 1·73, Ghatol 5·24, Tamluk 5·23. Weather hot and cloudy. Harvesting of *aus* continues. Agricultural prospects good. Fodder and water sufficient. Cattle-disease reported from Binpur thana. Common rice sells as follows:—

			Srs. ch.	
Sadar	...	...	12 8	} per rupee.
Contai	...	...	12 0	
Tamluk	...	...	11 0	
Ghatol	...	...	12 12	

**Hooghly.**—Rainfall at Sadar 3·48, Serampore 4·79, Arambagh 3·03. Weeding of *aman*, harvesting of *aus* and steeping of jute going on. Prospect of standing crops good. Weather seasonable. Fodder and water sufficient. Common rice sells as follows:—

			Srs. ch.	
Sadar	...	...	10 0	} per rupee.
Serampore	...	...	10 4	
Arambagh	...	...	11 6	

**Howrah.**—Rainfall at Sadar 2·92, Ulubaria 1·64. Fall general. No more rain wanted for next 6 or 10 days. Transplantation of *aman* paddy still going on. Reaping of *aus* still continues; its threshing and the cutting and steeping of jute going on. Sugarcane and vegetables are doing very well. Fodder and water-supply sufficient. No cattle-disease. Common rice sells on an average at 11 seers per rupee everywhere within the district.

**24-Parganas.**—Rainfall at Sadar 2·65, Barasat 1·22, Basirhat 3·01, Diamond Harbour 1·26. Weather hot and cloudy with moderate showers. State and prospect of crops good. *Aus* and jute still being harvested, and the latter being steeped. Transplantation of *aman* nearly finished. Common rice sells at 11 seers per rupee. Condition of cattle good. Supply of fodder and water sufficient.

**Nadia.**—Rainfall at Sadar 3·84, Ranaghat 4·03, Chudanga 5·44, Meherpur 3·60, Kushtia 3·16. Harvesting of jute continues. Prospects of standing crops good. No cattle-disease reported. Fodder and water sufficient. Common rice sells as follows:—

			Srs. ch.	
Sadar	...	...	12 0	} per rupee.
Ranaghat	...	...	11 11	
Chudanga	...	...	11 0	
Meherpur	...	...	13 6	
Kushtia	...	...	11 4	

**Murshidabad.**—Rainfall at Sadar 9·13, Kandi 5·40, Jangipur 6·23, Lalbagh 7·25. Weather seasonable. Harvesting of *bhatai* almost completed. There was a severe flood of the Kana Nadi and Moro river in Kandi subdivision. Jute being cut and steeped in Jangipur. Sugarcane doing well. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

			Srs. ch.	
Sadar	...	...	11 8	} per rupee.
Kandi	...	...	13 0	
Jangipur	...	...	12 0	
Lalbagh	...	...	11 0	

**Jessore.**—Rainfall at Sadar 3·72, Jhenida 8·54, Magura 10·07, Narail 6·46, Bangaon 2·74. Weather seasonable. Prospect of crops fair. Harvesting of *aus* almost completed. Rain has improved prospect of *aman* paddy. Fodder and water sufficient. Cattle-disease reported from Salikha outpost in Magura and Kalin in Narail. Common rice sells at 12 seers per rupee.

**Khulna.**—Rainfall at Sadar 3.41, Bagerhat 1.57, Satkhira 6.60. Weather seasonable. Transplantation of *aman* still continues. *Boro* maturing well and an average crop expected. Fodder and water sufficient. Cattle-disease reported from Paikgachha and Fakirhat. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	11 12	} per rupee.
Bagerhat	...	11 10	
Satkhira	...	10 8	

**Rajshahi.**—Rainfall at Sadar 5.96, Nator 3.51, Naugaon 4.93. Prospects of standing crop good. Harvesting of jute and *aus* continues. Transplantation of *aman* nearly finished. Common rice selling at 12 seers per rupee.

**Dinajpur.**—Rainfall at Sadar 3.80. Fall in the district general, varying from 2.98 to 8.21. Weather seasonable. Standing crops good. Steeping of jute continues. Cattle-disease to small extent reported from Kaliaganj. Fodder and water plentiful. Rice selling at 12 seers per rupee.

**Jalpaiguri.**—Rainfall at Sadar 20.63, Alipore Duars 11.33. Weather rainy with high wind during the first four days. Harvesting of *bhadoi* paddy nearly finished. Steeping of jute going on. *Haimanti* paddy doing well. Prospect favourable. Common rice sells at 11½ seers a rupee. Fodder and water sufficient.

**Darjeeling.**—Rainfall at Sadar 11.64, Kurseong 17.75, Siliguri 13.28. Weather seasonable. Hills—*Bhadoi*, *haimanti dhan*, maize, *bara* and *chhoto murua* doing well. Terai—Transplanting of *haimanti* paddy nearly finished. Reaping of jute and *bhadoi* paddy going on. Prospects good. Coarse rice sells as follows:—

	Srs.	ch.	
Hills	...	9 0	} per rupee.
Terai	...	10 0	

Maize sells at Darjeeling at 24 seers and at Kalimpong at 34 seers per rupee.

**Rangpur.**—Rainfall at Sadar 7.32, Gaibanda 2.29, Nilphamari 5.84, Kurigram 7.26. Weather cloudy and hot. Transplantation of *aman*, cutting and steeping of jute going on. Harvesting of *bhadoi* nearly finished. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	9 8	} per rupee.
Gaibanda	...	10 0	
Kurigram	...	12 0	
Nilphamari	...	10 8	

**Bogra.**—Rainfall at Sadar 4.63. Fall general. Harvesting of *aus* and transplantation of *aman* nearly finished. Steeping of jute going on. Outturn of jute estimated to be 70 per cent. Fodder and water sufficient. Prospects fair. Common rice sells at 12 seers per rupee.

**Pabna.**—Rainfall at Sadar 3.12, Sirajganj 5.05. Weather cloudy and rainy. Heavy showers general. Prospects of *aman* and sugarcane fair. Fodder sufficient. No cattle-disease. Common rice sells at 10 seers per rupee.

**Dacca.**—Rainfall at Sadar 5.2, Manikganj 11.41, Munshiganj 7.17, Narayanganj 5.39. Prospects of crops fair. Weather seasonable. Fodder available. No cattle-disease. Common rice sells at 11 seers per rupee.

**Mymensingh.**—Rainfall at Sadar 4.06, Jamalpur 2.93, Kishorganj 2.71, Tangail 4.18. Weather seasonable. Steeping of jute and transplantation of *aman* continues. Reaping of *aus* finished, its outturn estimated at 80 per cent. Fodder and water sufficient. No cattle-disease. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	12 0	} per rupee.
Kishorganj	...	11 4	
Jamalpur	...	11 6	
Tangail	...	10 4	

**Faridpur.**—Rainfall at Sadar 2.95, Goalando 3.50, Madaripur 5.62. Weather sultry with occasional rain. Prospects of *aman* paddy good. Fodder available in sufficiency. Condition of cattle good. Water sufficient. Common rice sells at 11 seers the rupee.

**Backergunge.**—Rainfall at Sadar 4.09. Fall general. Weather seasonable. Transplantation of *aman* continues. Prospects fair. Cattle-disease in thana Matbari. Fodder sufficient. Common rice sells at 13½ seers (*aus*) and 12 seers (*aman*) at Sadar; at Bhola 11 seers (*aus*) and 9½ seers (*aman*) per rupee.

**Tippura.**—Rainfall at Sadar 1.64, Brahmanbaria 41, Chandpur 11.53. Weather seasonable. Prospects of standing crops good. Reaping of jute and transplantation of paddy not yet completed. Fodder and water sufficient. No cattle-disease. Common rice sells at 14 seers per rupee.

**Nookhali.**—Rainfall at Sadar 4.28, Feni 2.63. Harvesting of *aus* and transplantation of *aman* still continues. Prospects fair. Cattle-disease at Sudharam. Water sufficient. Fodder not so. Common rice sells at Sadar at 11½ seers and at Feni at 13 seers per rupee.

**Chittagong.**—Rainfall at Sadar 2.26, Cox's Bazar 11.80. Reaping of *aus dhan* is finished. Transplantation of *aman dhan* is still going on. Water and fodder sufficient. Common rice selling at 12 seers 11 chitaks.

**Chittagong Hill Tracts.**—Rainfall 2.50. Weather fair. *Joom* harvesting and sowings of winter rice continue. Prospects of cotton and rape crop bad owing to too much rain and too little sunshine. Common rice sells at 12 seers per rupee.

**Patna.**—Rainfall at Sadar 10.20, Barh 3.75, Bihar 2.04, Dinapore 4.08, Hilsa 4.27, Bikram 4.52. Weather cloudy. Rainfall proved very useful, but more wanted. Harvesting of Indian-corn progressing. *Aghani* prospects improved. Transplantation of paddy continues. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

				Srs. ch.	
Patna	...	...	...	12 0	} per rupee.
Bihar	...	...	...	10 0	
Dinapore	...	...	...	12 4	
Barh	...	...	...	11 12	

**Gaya.**—Rainfall at Sadar 5.34, Jehanabad 4.95, Aurangabad 8.41, Nawadah 2.25. Weather seasonable. Transplantation of paddy over, except in the Nawadah subdivision. Harvesting of the *bhadoi* crops commenced. Sugarcane doing well. No cattle-disease. Fodder and water ample. Average price of common rice is 10½ seers per rupee.

**Shahabad.**—Rainfall at Sadar 1.23, Buxar 2.50, Bhabhna 3.48, Sasaram 2.41, Dehri 2.93. Weather hot and cloudy. Harvesting of *bhadoi* continues. Prospects of paddy and sugarcane good. No cattle-disease. Rice sells at Sadar at 11 seers a rupee.

**Baran.**—Rainfall at Sadar 5.59, Siwan 4.04, Gopalganj 6.75. Weather rainy and cloudy. Rainfall has been general and has proved most beneficial to agricultural operations. Standing crops doing well. Fodder and water sufficient. Cattle-disease reported from one village. Common rice sells at 12½ seers per rupee.

**Champanan.**—Rainfall at Sadar 4.73, Bettiah 5.00. Weather hot and cloudy. Harvesting and threshing of *bhadoi* crops going on. Outturn of maize estimated at 110 per cent. Transplantation of *aghani* rice finished. Sugarcane doing well. Little cattle-disease. Fodder and water sufficient. Common rice sells at 14½ seers and maize at 22 seers per rupee.

**Muzaffarpur.**—Rainfall at Sadar 2.25, Hajipur 4.11, Sitamarhi 1.60. Weather cloudy generally. Transplantation of paddy nearly finished. Harvesting of *bhadoi* crops continues. Prospects fair. Fodder and water sufficient. Prices are—Common rice 11½ seers, maize 22 seers a rupee.

**Darbhanga.**—Rainfall at Sadar 1.67, Samastipur 3.18, Madhubani 3.80. Transplantation of paddy is still going on. Harvesting of *bhadoi* in progress. Fodder and water sufficient. Cattle-disease is reported from Warisnagar and Samastipur thanas. Common rice sells as follows:—

				Srs. ch.	
Sadar	...	...	...	12 8	} per rupee.
Samastipur	...	...	...	12 0	
Madhubani	...	...	...	11 11	

**Monghyr.**—Rainfall at Sadar 5.22, Begusarai 4.51, Jamui 4.25. Weather hot and cloudy. Reaping of *bhadoi* crops and *makai* harvesting continues. Paddy benefited by rain. Sugarcane doing well. Fodder and water sufficient. No cattle-disease. Common rice sells as follows:—

				Srs. ch.	
Sadar	...	...	...	11 8	} per rupee.
Begusarai	...	...	...	12 0	
Jamui	...	...	...	11 0	

**Bhagalpur.**—Rainfall at Sadar 1.94, Banka 2.00, Madhipura 4.83, Supaul 5.16. Weather cloudy. Prospects of *aghani* continue fair. Harvesting of *marua* and *bhadoi* paddy going on. Transplantation of paddy completed. Sowing of *kurthi* commenced in Banka subdivision. Sporadic cases of cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

				Srs. ch.	
Sadar	...	...	...	11 6	} per rupee.
Banka	...	...	...	12 10	
Madhipura	...	...	...	13 0	
Supaul	...	...	...	15 0	

SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 17, 1902. 1331

**Purnea.**—Rainfall at Sadar 6·14, Kishanganj 4·15, Araria 5·25. Fall general. Weather variable. *Bhadai dhan* and jute are being harvested. Cattle-disease reported from Palasi outpost. Fodder and water sufficient. Common rice sells at Sadar and Kishanganj at 11 seers and at Araria at 14 seers per rupee.

**Malda.**—Rainfall at Sadar 3·52, Chanchal 6·70, Sibganj 4·88, Gajol 6·04. Fall general. Weather hot and cloudy. Plants of winter rice thriving. Prospects good. Harvesting of *bhadai* not yet completed. Cutting of jute still continues. No cattle-disease. Fodder and water sufficient. Common rice sells at 12½ seers per rupee.

**Southal Parganas.** Rainfall at Sadar 9·51, Deoghur 2·90, Godda 4·15, Jamtara 5·98, Pakaur 8·03, Rajmahal 4·84. Weather rainy but hot. Prospects of *aghani* good. Standing crops doing well. Transplantation of rice over. Harvesting of *makai* continues. Common rice sells at 12 seers per rupee at Sadar.

**Cuttack.**—Rainfall at Sadar 9·32. Fall general. Weather seasonable. Early *beali* being cut and average outturn expected. Late *beali* growing well into maturity. *Guru* and *laghu sarad* growing well. Prospects fair. No cattle-disease. Fodder and water sufficient. Old common rice sells at 14 seers 7 chitaks and new *beali* at 18 seers 6 chitaks at Sadar.

**Balasore.**—Rainfall at Sadar 0·87. Fall general. *Beali* being reaped. *Sarad* being transplanted and weeded. Prospects good. Standing crops with sugarcane prospering. Rice sells at 14 and 16 seers a rupee at Sadar and Bhadrak respectively. Fodder and drinking water sufficient.

**Angul.**—Rainfall at Sadar nil, Chhendipada 1·07, Tikerpara 0·47, Biasipara 0·24. Weather hot. Weeding of paddy and sowing of *rabi* in progress. Harvesting of *bhadai* crops continues. Common rice sells at 12 and 10½ seers per rupee at Sadar and Khondamal respectively.

**Puri.**—Rainfall 0·56. Fall general. Weather seasonable. Puddling and weeding of winter rice continues. Harvesting of *bhadai* paddy and *mandua* in progress. Outturn expected to be normal. Sugarcane and other miscellaneous crops doing well. Fodder and water-supply sufficient. Common rice sells at 14 seers 7 chitaks per rupee. Cattle-disease has broken out at places.

**Hazaribagh.**—Rainfall at Sadar 3·59, Giridih 4·55. Fall not general. Weather seasonable. Harvesting of *bhadai* crops going on. Sugarcane doing well. Cattle-disease reported from two thanas. Fodder and water sufficient. Common rice sells at 10½ seers per rupee.

**Ranchi.**—Rainfall at Sadar 6·86. Fall general. Weather seasonable. Prospects good. Sowing of *sirgaja* and *kaathi* in progress. Cattle-disease reported from several thanas. Fodder and water sufficient. Common rice selling at 14 seers per rupee.

**Palaman.**—Rainfall at Sadar 2·50. Weather seasonable. *Sazan* and *gundhi* being harvested. Standing crops all doing well. Cattle-disease continues in places. Fodder and water sufficient. Prices at Sadar—Rice 11½ seers, Maize 16 seers 14 chitaks per rupee.

**Manbhum.**—Rainfall at Sadar 1·99, Gobindpur 2·87. Fall general. Weather seasonable. Prospects of crops on ground good. Transplantation of winter rice completed. Palasi has about 75 per cent. *Doha tasar* about 50 per cent. of normal harvest. Fodder and water sufficient. Cattle-disease not reported. Average price of common rice at Sadar is 12 seers and at Gobindpur 10½ seers per rupee.

**Singhbhum.**—Rainfall 1·13. Prospect of crop good. Harvesting of *guru* paddy commenced. Average price of rice is 12½ seers per rupee in the district; at Chasibasa 12 seers.

**General Summary.**—The rainfall during the week was general and heavy at places. More rain is still required in the Patna district. In Rampur Hat subdivision of the Birbhum district considerable loss of property and loss of some lives have been caused by floods. Sugarcane promising. Harvesting of *bhadai* crops still continues. Transplantation of winter rice is almost over. Standing crops doing well. Prospects fair. Cattle-disease reported from 15 districts. Fodder and water generally adequate. The price of common rice has risen in 3 districts, fallen in 12, and is stationary in the rest (32).

By order of the Lieutenant-Governor of Bengal,

W. C. MACPHERSON,

Offg. Secretary to the Govt. of Bengal.

REVENUE DEPARTMENT,

The 16th September 1902.



## Meteorological Report of the Province

METEOROLOGICAL DIVISION	STATION OBSERVATIONS													
	DIVISION.	DISTRICT.	Representative stations.	AIR PRESSURE.				WIND.		TEMPERATURE.				
				Highest, 8 A.M. barometer reading.	Lowest, 8 A.M. barometer reading.	Mean, 8 A.M. reduced to 32°.	Mean reduced to sea-level and constant gravity, Lat. 22°.	Mean direction at 8 A.M.	Mean velocity in miles daily.	Highest of month.	Lowest of month.	Mean daily maximum temperature.	Mean daily minimum temperature.	Mean daily temperature.
NORTH-WEST BENGAL.	Burdwan	Burdwan	Burdwan	29.675	29.461	29.568	29.415	+0.02	89°E	73	80.3	78.8	79.1	78.9
		Bartham	Bartham	29.476	29.266	29.371	29.307	—	83°E	84	80.3	78.9	79.1	78.9
		Bentura	Bentura	29.466	29.256	29.361	29.296	—	851°E	81	80.8	78.9	79.1	78.9
		Midnapore	Midnapore	29.504	29.289	29.510	29.285	+0.06	814°E	88	80.8	78.7	79.7	78.8
		Hoochly	Hoochly	—	—	—	—	—	—	—	—	—	—	—
	Presidency	Howrah	Howrah	29.720	29.443	29.583	29.306	+0.14	85°E	719	81.3	77.8	79.6	79.1
		36-Parganas	Sanger Island	29.763	29.505	29.634	29.416	+0.05	817°E	67	80.1	74.5	78.8	78.4
		Calcutta	Calcutta	29.716	29.436	29.576	29.327	—	822°E	88	80.8	76.1	79.0	78.8
		Nadia	Krishnanagar	29.684	29.418	29.551	29.319	+0.14	83°E	80	80.8	75.5	79.7	78.4
		Murshidabad	Bardhaman	29.718	29.453	29.585	29.320	+0.05	848°E	80	80.8	75.5	79.7	78.4
NORTH BENGAL.	Rajshahi	Kumail	Kumail	29.709	29.433	29.571	29.302	+0.07	84°E	78	80.1	78.1	79.1	78.4
		Rajshahi	Rajshahi	29.686	29.406	29.546	29.315	+0.04	854°E	74	80.8	78.0	79.0	78.8
		Jalpaiguri	Jalpaiguri	29.564	29.295	29.430	29.201	+0.03	880°E	43	80.4	78.1	79.3	78.7
		Darjeeling	Darjeeling	29.686	29.406	29.546	29.315	—	843°E	83	80.8	78.1	79.0	78.8
		Cooh Behar	Cooh Behar	29.636	29.366	29.501	29.271	—	801°E	38	80.8	76.1	79.1	78.4
	Dacca	Rangpur	Rangpur	29.654	29.384	29.519	29.289	+0.07	801°E	78	80.7	78.8	79.6	79.1
		Bogra	Bogra	29.604	29.334	29.469	29.239	+0.06	806°E	106	80.8	74.8	79.0	78.4
		Fahga	Birajganj	29.734	29.464	29.599	29.329	+0.15	806°E	48	81.3	78.3	79.6	79.1
		Dacca	Maryanganj	29.765	29.495	29.630	29.360	+0.09	817°E	180	82.1	78.7	79.8	79.3
		Mymensingh	Mymensingh	29.715	29.445	29.580	29.310	+0.11	840°E	68	80.7	78.1	79.6	79.1
CENTRAL BENGAL.	Chittagong	Faridpur	Faridpur	29.743	29.473	29.608	29.338	+0.10	857°E	97	81.8	78.4	79.6	79.1
		Backergunge	Backergunge	29.789	29.519	29.654	29.384	+0.18	882°E	91	80.8	78.1	79.3	78.4
		Tippera	Tippera	29.741	29.471	29.606	29.336	—	844°E	98	80.8	78.3	79.6	79.1
		Chittagong	Chittagong	29.741	29.471	29.606	29.336	—	844°E	104	80.7	78.3	79.6	79.1
		Chittagong Hill Tracts	Chittagong Hill Tracts	29.723	29.453	29.588	29.318	+0.04	880°E	187	81.5	78.0	79.6	79.1
	Patna	Patna	Patna	29.540	29.270	29.405	29.235	+0.00	875°E	180	80.9	74.7	79.3	78.1
		Gaya	Gaya	29.543	29.273	29.408	29.238	+0.10	847°E	67	80.8	78.2	79.7	78.7
		Shahabad	Shahabad	29.471	29.201	29.336	29.166	+0.11	80°E	106	80.8	78.0	79.1	78.4
		Arrah	Arrah	29.443	29.173	29.308	29.138	—	812°W	48	80.0	78.8	79.6	79.1
		Chhapra	Chhapra	29.541	29.271	29.406	29.236	—	807°E	60	80.8	78.0	79.1	78.4
SOUTH BENGAL.	Bhagalpur	Chhapra	Chhapra	29.511	29.241	29.376	29.206	—	807°E	140	80.4	78.3	79.1	78.4
		Muzaffarpur	Muzaffarpur	29.469	29.199	29.334	29.164	—	874°E	88	80.7	78.7	79.6	79.1
		Darbhanga	Darbhanga	29.508	29.238	29.373	29.203	+0.10	861°E	80	80.8	78.3	79.6	79.1
		Monohar	Monohar	29.578	29.308	29.443	29.273	+0.08	848°E	80	80.8	78.1	79.6	79.1
		Bhagalpur	Bhagalpur	29.534	29.264	29.399	29.229	+0.15	880°E	60	80.3	78.3	79.6	79.1
	Medinipur	Medinipur	Medinipur	29.500	29.230	29.365	29.195	+0.11	836°E	46	80.0	77.0	79.0	78.0
		Malda	Malda	29.500	29.230	29.365	29.195	+0.11	836°E	46	80.0	77.0	79.0	78.0
		Central Parganas	Naya Danga	29.561	29.291	29.426	29.256	+0.09	830°E	58	80.0	78.0	79.1	78.4
		Cuttack	Cuttack	29.552	29.282	29.417	29.247	+0.16	840°W	51	80.4	78.3	79.6	79.1
		Palas Point	Palas Point	29.721	29.451	29.586	29.316	+0.13	861°W	118	80.8	74.1	79.3	78.4
WEST BENGAL.	Calcutta	Calcutta	Calcutta	29.600	29.330	29.465	29.295	+0.07	826°W	58	80.4	78.3	79.6	79.1
		Port	Port	29.744	29.474	29.609	29.339	—	877°E	180	80.8	78.3	79.6	79.1
		Howrah	Howrah	29.734	29.464	29.599	29.329	+0.09	816°W	170	81.2	78.3	79.6	79.1
		Ranchi	Ranchi	29.511	29.241	29.376	29.206	+0.10	836°W	180	81.2	78.3	79.6	79.1
		Daltonganj	Daltonganj	29.599	29.329	29.464	29.294	—	840°E	81	80.8	78.3	79.6	79.1
	Jharkhand	Patna	Patna	29.517	29.247	29.382	29.212	—	876°E	32	80.8	78.4	79.7	78.7
		Chandigarh	Chandigarh	29.515	29.245	29.380	29.210	+0.09	861°W	32	80.1	78.0	79.3	78.4
		Dibrugarh	Dibrugarh	29.440	29.170	29.305	29.135	—	810°W	26	80.2	78.0	79.3	78.4
		Tezpur	Tezpur	29.470	29.200	29.335	29.165	+0.08	815°W	80	80.2	78.0	79.3	78.4
		Guwahati	Guwahati	29.510	29.240	29.375	29.205	—	826°E	88	80.2	78.0	79.3	78.4
SOUTH BENGAL.	Kolkata	Kolkata	Kolkata	29.600	29.330	29.465	29.295	+0.07	826°W	58	80.4	78.3	79.6	79.1
		Guwahati	Guwahati	29.510	29.240	29.375	29.205	—	826°E	88	80.2	78.0	79.3	78.4
		Dibrugarh	Dibrugarh	29.440	29.170	29.305	29.135	—	810°W	26	80.2	78.0	79.3	78.4
		Tezpur	Tezpur	29.470	29.200	29.335	29.165	+0.08	815°W	80	80.2	78.0	79.3	78.4
		Guwahati	Guwahati	29.510	29.240	29.375	29.205	—	826°E	88	80.2	78.0	79.3	78.4
	Jharkhand	Kolkata	Kolkata	29.600	29.330	29.465	29.295	+0.07	826°W	58	80.4	78.3	79.6	79.1
		Guwahati	Guwahati	29.510	29.240	29.375	29.205	—	826°E	88	80.2	78.0	79.3	78.4
		Dibrugarh	Dibrugarh	29.440	29.170	29.305	29.135	—	810°W	26	80.2	78.0	79.3	78.4
		Tezpur	Tezpur	29.470	29.200	29.335	29.165	+0.08	815°W	80	80.2	78.0	79.3	78.4
		Guwahati	Guwahati	29.510	29.240	29.375	29.205	—	826°E	88	80.2	78.0	79.3	78.4

for the month of August 1902.

DISTRICT OBSERVATIONS.															DISTRICT.	
Variation from normal mean.	CLOUDS.			Rain-fall.	RAINFALL—											
	Mean cloud amount, P. A. M.	Variation from normal mean, P. A. M.	Normal mean.		1st month.					Since 14th of May 1902.						
					Mean of 4th.	Normal mean.	Variation from mean.	Number of rainy days.	Normal mean.	Mean of 4th.	Normal mean.	Variation.	Mean num. of rainy days.	Normal mean.		Mean num. of rainy days.
+1	7.9	-0.7	7.60	7.60	11.74	-4.14	11.06	18.78	27.12	37.13	-10.01	37.00	40.83	Burdwan.		
-	4.9	-	8.08	8.08	12.34	+0.89	10.17	10.13	31.18	39.08	-1.74	47.59	40.80	Hibbarn.		
-	7.0	-	5.81	5.81	11.89	-0.91	11.80	14.29	31.82	37.00	-16.07	34.00	40.48	Bankura.		
-	3.9	-	12.74	12.74	12.80	+0.06	11.13	15.34	20.97	35.35	-2.51	40.14	40.80	Kidnapore.		
-	7.9	-0.4	8.06	8.06	11.29	-0.10	14.90	14.90	34.90	30.78	-1.33	40.08	40.78	Hoschly.		
-	8.6	-0.4	14.01	14.01	12.89	+1.02	10.90	15.88	40.12	38.00	+1.12	40.00	40.80	Hoschly.		
-	8.3	-	8.24	8.24	10.86	-0.83	12.40	15.90	30.07	38.00	-4.05	40.40	47.63	Nadia.		
-	7.6	-1.18	10.51	10.51	10.43	+0.75	12.83	14.83	30.46	34.76	+4.70	47.13	40.35	Murshidabad.		
-	8.0	-2.3	8.99	8.99	10.47	-0.29	13.90	15.87	38.18	35.77	-3.09	37.40	40.77	Jessore.		
-	8.1	-	13.91	13.91	10.84	+3.07	12.17	14.32	40.33	35.42	+0.91	41.07	40.40	Khanna.		
-	8.7	-	9.72	9.72	12.25	+2.44	13.50	14.38	38.91	40.33	+0.08	40.00	40.79	Rajshahi.		
-	8.0	+0.2	10.12	10.12	12.61	+2.04	13.67	16.80	37.08	38.30	+1.00	40.07	40.00	Dinajpur.		
+3	8.4	-	10.08	10.08	12.59	+2.04	13.67	16.80	37.08	38.30	+1.00	40.07	40.00	Dumuria.		
-	8.4	-	10.90	10.90	12.63	+2.01	14.00	15.70	38.87	39.00	+0.13	40.00	40.13	Rangpur.		
-	7.9	-	10.78	10.78	12.48	+0.75	14.30	14.90	31.00	40.30	+0.71	40.00	40.19	Patna.		
-	8.1	-	9.74	9.74	11.06	-1.32	13.90	15.80	40.74	38.00	-2.74	38.00	40.00	Dacca.		
-1	8.0	+0.7	10.10	10.10	12.49	+2.39	17.30	17.30	30.30	40.30	+10.00	40.30	40.30	Mymensingh.		
-	7.8	-	14.15	14.15	12.48	-0.67	16.90	16.90	40.00	40.15	+0.15	40.00	40.15	Faridpur.		
-	6.5	-	10.11	10.11	12.40	-0.20	17.00	16.00	40.00	40.14	+0.14	40.00	40.14	Backergunge.		
-	6.6	-	10.44	10.44	12.78	-0.34	14.83	15.80	41.00	40.40	+0.40	40.00	40.40	Tippah.		
-	6.0	-	10.00	10.00	12.50	-0.50	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Naokhal.		
-3	7.3	-0.3	10.00	10.00	12.50	-0.50	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Chittagong.		
-	6.2	-0.1	10.08	10.08	12.51	-0.49	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Chittagong.		
+2	6.7	-2.8	10.04	10.04	12.51	-0.49	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Chittagong.		
-	6.7	-	7.70	7.70	11.74	-4.14	11.06	18.78	27.12	37.13	-10.01	37.00	40.83	Chittagong.		
-	7.0	-	8.08	8.08	12.34	+0.89	10.17	10.13	31.18	39.08	-1.74	47.59	40.80	Chittagong.		
-	7.9	-	5.81	5.81	11.89	-0.91	11.80	14.29	31.82	37.00	-16.07	34.00	40.48	Chittagong.		
-	3.9	-	12.74	12.74	12.80	+0.06	11.13	15.34	20.97	35.35	-2.51	40.14	40.80	Chittagong.		
+5	7.4	+1.5	8.06	8.06	11.29	-0.10	14.90	14.90	34.90	30.78	-1.33	40.08	40.78	Chittagong.		
-	8.6	-	14.01	14.01	12.89	+1.02	10.90	15.88	40.12	38.00	+1.12	40.00	40.80	Chittagong.		
+2	8.3	-	8.24	8.24	10.86	-0.83	12.40	15.90	30.07	38.00	-4.05	40.40	47.63	Chittagong.		
-	7.6	-	10.51	10.51	10.43	+0.75	12.83	14.83	30.46	34.76	+4.70	47.13	40.35	Chittagong.		
-	8.0	-2.3	8.99	8.99	10.47	-0.29	13.90	15.87	38.18	35.77	-3.09	37.40	40.77	Chittagong.		
-	8.1	-	13.91	13.91	10.84	+3.07	12.17	14.32	40.33	35.42	+0.91	41.07	40.40	Chittagong.		
-	8.7	-	9.72	9.72	12.25	+2.44	13.50	14.38	38.91	40.33	+0.08	40.00	40.79	Chittagong.		
-	8.0	+0.2	10.12	10.12	12.61	+2.04	13.67	16.80	37.08	38.30	+1.00	40.07	40.00	Chittagong.		
-	8.4	-	10.08	10.08	12.59	+2.04	13.67	16.80	37.08	38.30	+1.00	40.07	40.00	Chittagong.		
-	8.4	-	10.90	10.90	12.63	+2.01	14.00	15.70	38.87	39.00	+0.13	40.00	40.13	Chittagong.		
-	7.9	-	10.78	10.78	12.48	+0.75	14.30	14.90	31.00	40.30	+0.71	40.00	40.19	Chittagong.		
-	8.1	-	9.74	9.74	11.06	-1.32	13.90	15.80	40.74	38.00	-2.74	38.00	40.00	Chittagong.		
-	8.0	+0.7	10.10	10.10	12.49	+2.39	17.30	17.30	30.30	40.30	+10.00	40.30	40.30	Chittagong.		
-	7.8	-	14.15	14.15	12.48	-0.67	16.90	16.90	40.00	40.15	+0.15	40.00	40.15	Chittagong.		
-	6.5	-	10.11	10.11	12.40	-0.20	17.00	16.00	40.00	40.14	+0.14	40.00	40.14	Chittagong.		
-	6.6	-	10.44	10.44	12.78	-0.34	14.83	15.80	41.00	40.40	+0.40	40.00	40.40	Chittagong.		
-	6.0	-	10.00	10.00	12.50	-0.50	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Chittagong.		
-3	7.3	-0.3	10.00	10.00	12.50	-0.50	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Chittagong.		
-	6.2	-0.1	10.08	10.08	12.51	-0.49	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Chittagong.		
+2	6.7	-2.8	10.04	10.04	12.51	-0.49	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Chittagong.		
-	6.7	-	7.70	7.70	11.74	-4.14	11.06	18.78	27.12	37.13	-10.01	37.00	40.83	Chittagong.		
-	7.0	-	8.08	8.08	12.34	+0.89	10.17	10.13	31.18	39.08	-1.74	47.59	40.80	Chittagong.		
-	7.9	-	5.81	5.81	11.89	-0.91	11.80	14.29	31.82	37.00	-16.07	34.00	40.48	Chittagong.		
-	3.9	-	12.74	12.74	12.80	+0.06	11.13	15.34	20.97	35.35	-2.51	40.14	40.80	Chittagong.		
+5	7.4	+1.5	8.06	8.06	11.29	-0.10	14.90	14.90	34.90	30.78	-1.33	40.08	40.78	Chittagong.		
-	8.6	-	14.01	14.01	12.89	+1.02	10.90	15.88	40.12	38.00	+1.12	40.00	40.80	Chittagong.		
-	8.3	-	8.24	8.24	10.86	-0.83	12.40	15.90	30.07	38.00	-4.05	40.40	47.63	Chittagong.		
-	7.6	-	10.51	10.51	10.43	+0.75	12.83	14.83	30.46	34.76	+4.70	47.13	40.35	Chittagong.		
-	8.0	-2.3	8.99	8.99	10.47	-0.29	13.90	15.87	38.18	35.77	-3.09	37.40	40.77	Chittagong.		
-	8.1	-	13.91	13.91	10.84	+3.07	12.17	14.32	40.33	35.42	+0.91	41.07	40.40	Chittagong.		
-	8.7	-	9.72	9.72	12.25	+2.44	13.50	14.38	38.91	40.33	+0.08	40.00	40.79	Chittagong.		
-	8.0	+0.2	10.12	10.12	12.61	+2.04	13.67	16.80	37.08	38.30	+1.00	40.07	40.00	Chittagong.		
-	8.4	-	10.08	10.08	12.59	+2.04	13.67	16.80	37.08	38.30	+1.00	40.07	40.00	Chittagong.		
-	8.4	-	10.90	10.90	12.63	+2.01	14.00	15.70	38.87	39.00	+0.13	40.00	40.13	Chittagong.		
-	7.9	-	10.78	10.78	12.48	+0.75	14.30	14.90	31.00	40.30	+0.71	40.00	40.19	Chittagong.		
-	8.1	-	9.74	9.74	11.06	-1.32	13.90	15.80	40.74	38.00	-2.74	38.00	40.00	Chittagong.		
-	8.0	+0.7	10.10	10.10	12.49	+2.39	17.30	17.30	30.30	40.30	+10.00	40.30	40.30	Chittagong.		
-	7.8	-	14.15	14.15	12.48	-0.67	16.90	16.90	40.00	40.15	+0.15	40.00	40.15	Chittagong.		
-	6.5	-	10.11	10.11	12.40	-0.20	17.00	16.00	40.00	40.14	+0.14	40.00	40.14	Chittagong.		
-	6.6	-	10.44	10.44	12.78	-0.34	14.83	15.80	41.00	40.40	+0.40	40.00	40.40	Chittagong.		
-	6.0	-	10.00	10.00	12.50	-0.50	17.00	17.00	40.00	40.00	+0.00	40.00	40.00	Chittagong.		
-3	7.3	-0.3	10.00	10.00	12.50	-0.50	17.00	17.00	40.00	40.00	+0.00	40.00	40.00			

Table of Rainfall recorded at station

[illegible]

Bengal in August 1902.

Station.	District.	Division.	Maximum of Rainfall.	1	2	3	4	5	6	7	8	9	10	11	12	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Month.	From 1st May up to 31st August.	Average rainfall from 1st May to 31st August.	Station.	District.	Division.	Maximum of Rainfall.
Kalna	Burdwan.		37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Kalna	Burdwan.		37.01
Bardwan			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Bardwan			37.01
Kalna			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Kalna			37.01
Bardwan I.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Bardwan I.			37.01
Mankur.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Mankur.			37.01
Buri			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Buri			37.01
Hetaopur.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Hetaopur.			37.01
Banspur Hat.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Banspur Hat.			37.01
Bolpur.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Bolpur.			37.01
Murari.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Murari.			37.01
Lupur.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Lupur.			37.01
Bankura			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Bankura			37.01
Vindrapur.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Vindrapur.			37.01
Kallara			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Kallara			37.01
Khatra			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Khatra			37.01
Indra			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Indra			37.01
Kotalpur.			37.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Kotalpur.			37.01

Table of Rainfall recorded at station.

[illegible]

pengal in August 1902—continued.

[illegible]

Table of Rainfall recorded at station

[illegible]



Bengal in August 1902--continued.

Year	1	2	3	4	5	6	7	8	9	10	11	12	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	El Niño rainfall for the month.	Total rainfall from 1st May to 31st August.	Average rainfall from 1st May to 31st August.	Station.	District.	Division.	Metropolitan District.
1900	0.37	0.42	0.23	0.08	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	13	13.00	10.00	10.74	38.79	31.18	Panna	Panna.			
1901	0.39	0.45	0.28	0.19	0.28	0.21	0.28	0.21	0.28	0.21	0.28	0.21	15	15.00	11.00	11.75	38.99	31.18	Dinapore.	Dinapore.			
1902	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	10.47	38.11	30.11	Ilhar.	Ilhar.			
1903	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.37	38.11	31.13	Ilhar.	Ilhar.			
1904	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	9	9.00	6.00	11.58	37.90	30.50	Ilhar.	Ilhar.			
1905	0.32	0.37	0.21	0.12	0.21	0.14	0.21	0.14	0.21	0.14	0.21	0.14	8	8.00	5.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1906	0.34	0.39	0.23	0.14	0.23	0.16	0.23	0.16	0.23	0.16	0.23	0.16	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1907	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1908	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1909	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1910	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1911	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1912	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1913	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1914	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1915	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1916	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1917	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1918	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1919	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1920	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1921	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1922	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1923	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1924	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1925	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1926	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1927	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1928	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1929	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1930	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1931	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1932	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1933	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1934	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1935	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1936	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1937	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1938	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1939	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1940	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1941	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1942	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1943	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1944	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1945	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1946	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1947	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1948	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1949	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1950	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1951	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1952	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1953	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1954	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1955	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1956	0.39	0.44	0.27	0.18	0.27	0.20	0.27	0.20	0.27	0.20	0.27	0.20	12	12.00	9.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1957	0.36	0.41	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1958	0.38	0.43	0.26	0.17	0.26	0.19	0.26	0.19	0.26	0.19	0.26	0.19	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1959	0.35	0.40	0.24	0.15	0.24	0.17	0.24	0.17	0.24	0.17	0.24	0.17	10	10.00	7.00	11.40	37.90	30.50	Ilhar.	Ilhar.			
1960	0.37	0.42	0.25	0.16	0.25	0.18	0.25	0.18	0.25	0.18	0.25	0.18	11	11.00	8.01	11.40	37.90	30.50	Ilhar.	Ilhar.			
1961	0.39	0.44	0.27	0.18	0.																		



Table of Rainfall recorded at stations

Division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
Bengal.	Bengal.	Boothal Far-	Amamboni	1.44	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08		
		ganga-rail.	Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Bengal.	Bengal.	Boothal Far-	Amamboni	1.44	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
				ganga-rail.	Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21			0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Bengal.	Bengal.			Boothal Far-	Amamboni	1.44	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
		ganga-rail.	Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08			
Amamboni	0.21	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.													

Rains in August 1902—continued.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574																																																																																																																																																																																																																																																																																																																																																																																																																																										

**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE MONTH OF AUGUST 1902.**

WEATHER in Bengal during the greater part of August was generally such as occurs during the monsoon season with fairly well distributed, though not in all parts normal, rainfall. The exceptional conditions noticed in earlier reports still existed in the early half of the month, but soon after the middle a change of a marked kind occurred and was chiefly shown by the movement of three shallow depressions which passed north-westward from the Bay in rapid succession between the 19th and end of the month.

The principal disturbance in the first half of the month was an exact parallel to one which occurred at the end of June and beginning of July, and which led to the commencement of general south-west monsoon weather in the greater part of Bengal. As on that occasion a fall of pressure began in Assam and North Bengal and extended southward over the Province, but chiefly westward along the Himalayan range. Rainfall began in the extreme east of Assam on the 9th, it extended to North Bengal on the 10th, and then came a general heavy fall over the whole of Bengal Proper on the 11th. This westerly and southerly extension of the rainfall area ceased suddenly, and the heavy falls on the 12th were confined to the hills and submontane districts.

The absence of any indication of disturbed weather over the Bay on the south of the Province during the days preceding the changes referred to, as well as the fact that not only pressure but also temperature began to fall in the north-east first and that the extension of these changes was southward and westward, show that the disturbance was of a kind which, though not rare in the present season, has been exceptional in previous years. Also the information obtained from the ground level observations is insufficient to account for the occurrence of the general heavy rainfall on the 11th.

The rainfall of those days forms a considerable portion of what was recorded in North Bengal during the month, as an important change began soon afterwards, a change which may not have been independent of the earlier occurrences, but which in the absence of information must be treated as separate and independent.

The first indication of the change was the formation of the shallow depression in the west or south-west of the Bay about the 15th. It remained shallow and ill-defined for several days, causing irregularly cyclonic winds on the coast of the Orissa and Madras. The winds never attained to even moderate strength; and the chief feature was the fall of temperature, which, beginning in the extreme south-west of the Bay, moved north-westward into India. The central area of the depression on the 19th was near the north coast of the Orissa, as shown by the northerly winds at Visagapatam and Gopalpur. On the following day the depression having moved westward, weather was of ordinary monsoon character over the Bay and Province.

Usually when depressions are forming over the Bay, especially in August and September, and northerly winds prevail over the Province owing to the indraught towards the low pressure area, rainfall to a great extent ceases in Bengal. During the days between the 16th and 19th when the above disturbance affected weather in the west of the Bay, very little rain fell in the western districts, but showers, generally light, were of almost daily occurrence in East and North Bengal. After the depression passed inland on the 19th, general light or moderate rain fell over the greater part of the Province, but it soon ceased because of the approach from the east of another disturbance towards the north of the Bay.

This disturbance was first shown by a moderate fall of pressure in the south of Burma on the 21st. The fall was more rapid on the 22nd, and there was then a well marked depression over the area represented by Rangoon and Moulmein, with a very uniform distribution of pressure over the Province and the north of the Bay. The depression continued to move north-westward, the central area being south-east from Akyab on the 23rd and close to the Orissa Coast on the 24th. Some development had occurred during the two days the disturbance was over the Bay, and when the centre was in the north-west angle, there was a steep pressure gradient with strongish winds over the whole sea area. The highest wind velocity at Diamond Island was 20 miles an hour on the 23rd, and on the west coast 20 miles at Sangor Island and Gopalpur on the 24th.

On the 25th the depression was inland and over Chota Nagpur, and on the 26th it had moved westward beyond the boundary of the Province. A few stations in Orissa and Chota Nagpur reported heavy rainfall during the passage of the disturbance, and after it had moved westward, general light rain fell in the northern districts for a day or two.

The recovery of pressure after the passage of the above depression over Bengal was not complete when the third depression of the latter part of the month began to appear, again in the south of Burma. A moderate fall of pressure was reported from Moulmein and Tavoy on the 28th, and on the 27th the wind circulation was slightly abnormal on the Burma coast between Diamond Island and Akyab. But for several days the disturbance was very slight and was shown as a wide diffused depression over the north of the Bay with light irregularly cyclonic winds at coast stations. On the 31st it was better defined, the central area was near

the south coast of Orissa, and a steeper pressure gradient had developed over the south and centre of the Bay. The depression was still shallow, and the greatest defect was 1 inch at False Point. On the 1st September the centre was still over the Bay, but it then moved rapidly westward, and on the 2nd was to the west of Orissa.

Though there was very little wind with the disturbance and no heavy rainfall, showery weather became general over the Province after the passage inland.

The month was divided naturally into two equal parts. During the first-half fine settled weather prevailed over the Bay and general rain fell inland until the disturbance occurred in the Himalayan region in the second week. The period of general rainfall in Bengal was practically brought to a close by the heavy burst on the 11th, any heavy falls on subsequent days being chiefly in the northern district. During the second-half of the month weather was more disturbed over the Bay, and rainfall inland was not only lighter than during the first-half, but lighter than is usual at the time of the year. This was due to the westerly movement of the depressions and to the monsoon current being diverted westward from the Bay. The rainfall in Bengal generally during the latter half of the month occurred for two or three days at a time, while the depressions were in the north-west of the Bay and for a short time subsequent to the passage inland. At other times comparatively rainless weather prevailed, more especially in the western and central districts.

Pressure underwent considerable oscillations at times, but as no deep depression occurred, the daily rise or fall was never more than moderately rapid. The more noticeable changes were on the 9th and 10th, when weather was disturbed in the Himalayan region, and on the 24th and 25th, when the second of the three depressions of the latter part of the month was passing from the north-west angle of the Bay across the south-western districts. The fall in front of the depression was about 15 inch in 25 hours, and a rise of similar amount occurred during the recovery.

The difference from the normal on an average for the month varied from excess of 02 inch in Bengal Proper to defect of similar amount in the south of Burma and the south of Madras.

*Temperature.*—As cloud was not so heavy as usual in August, temperature was almost continuously higher than usual, though not by large amounts. The only occasions when comparatively cool weather was fairly general were about the 11th and the 26th after the rainfall caused by the disturbances of those dates. There was a rather large excess in Bihar while the depressions were developing over the Bay in the latter half of the month, the greatest being 5° on the 16th. At other times excess was only 1° or 2°. Owing to the continued excess from day to day the average temperature for the month is above the normal by considerable amounts. In South-West Bengal, Bihar and Chota Nagpur excess is 1°·5, in East Bengal and Orissa about 1°, and in North Bengal rather less than 1°.

Excess in maximum temperature varied from 2° to 3° in the western districts to less than 1° in the east. In minimum readings it was smaller, and generally less than 1° in Bengal Proper. In the west of Bihar and Chota Nagpur it was about 1°·5 on an average for the month.

*Rainfall* on an average for the larger divisions was below the normal, except in North Bengal, where there was excess of 3·5 inches, and in Orissa, where there was a small excess of a quarter of an inch. The defect was large in Chota Nagpur, more than 6 inches, and moderate in Bihar, more than 3 inches.

The reasons for the heavy rainfall in North Bengal and Orissa have been given. In the former it was due to the disturbance in the Himalayan region about the 10th and 11th, and in the latter to the series of depressions which crossed the south-western districts during the second part of the month.

The area of largest defect is the north and east of Chota Nagpur. Over that area there was a uniform defect of about 6 inches. Excluding the Orissa coast districts and the sub-montane tract in the north of Bihar, where the rainfall was generally in excess, the whole of the western half of the Province received less than the usual amount, though not to any great extent, except in the part of Chota Nagpur referred to. In Bengal Proper the variation from the normal is irregular. Generally there is defect, except in the eastern half of North Bengal and in parts of East Bengal. The greatest excess is 17 inches at Baxa, and at a few stations in the extreme north-east it is between 8 and 10 inches. In Chittagong defect is generally between 8 and 10 inches.

The actual falls were below 7 inches in the north of Chota Nagpur and the adjacent part of South Bihar, and below 5 inches at a few scattered stations in that region. In the south of Chota Nagpur, the greater part of Orissa, the southern and eastern parts of Lower Bengal, the greater part of North Bengal and the extreme north of Bihar falls were 10 inches and upwards, the larger amounts as usual being in the south-east and north-east. In Cooch Behar, Jalpaiguri and Darjeeling, Netrokona and Noakhali amounts exceed 20 inches, and at a few stations in the extreme north of North Bengal falls were upwards of 30 inches.

The comparison of the actual rainfall in the various large divisions of the Province with the normal is most accurately and conveniently shown in the form of a percentage. The figures representing the rainfall for the month, calculated in this way, are included in the table below under the heading of August. This table really gives a condensed summary of

the rainfall statistics of the present year up to date for each meteorological division, the first eight columns giving the actual average rainfall in each division in each month, expressed as a percentage of the normal, while the ninth column gives the total rainfall for the first eight months expressed as a percentage of the normal rainfall for that period:—

METEOROLOGICAL DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	Actual rainfall of first eight months of 1902 expressed as a percentage of the normal fall for the period.
South-West Bengal	Nil	2	166	250	186	57	110	89	99
North Bengal	11	2	261	154	112	108	112	123	116
East Bengal	Nil	1	85	308	127	131	129	93	127
Bihar	18	4	263	177	99	60	111	71	86
Orissa	104	1	97	318	82	58	169	102	111
Chota Nagpur	81	41	82	116	116	33	111	59	75

The following table gives full data for the comparison of the actual and normal rainfall of the month of August in all districts of the Province:—

Percentage Table for August 1902.

DIVISION.	DISTRICT.	Normal rainfall for August.	Actual rainfall for August 1902.	Percentage of actual to normal rainfall.	Percentage excess (+) or deficit (-).
South-West Bengal	Burdwan	11.78	7.50	64	- 36
	Birbhum	11.45	12.34	108	+ 8
	Bankura	11.80	8.98	76	- 24
	Midnapore	12.86	13.20	103	+ 3
	Hooghly	13.55	9.55	70	- 30
	Howrah	11.39	11.38	99	- 1
	24-Parganas	13.29	11.14	84	- 16
	Calcutta	12.69	14.01	110	+ 10
	Nadia	10.96	8.48	77	- 23
	Murshidabad	10.45	13.31	128	+ 28
	Jessore	10.67	8.39	78	- 22
	Khulna	13.33	9.29	69	- 31
	Rajshahi	10.35	11.63	112	+ 12
	Dinajpur	12.41	15.26	123	+ 13
North Bengal	Jalpaiguri	26.53	30.17	114	+ 14
	Darjeeling	24.04	26.43	109	+ 9
	Cooch Behar	19.28	20.73	108	+ 8
	Rangpur	12.68	14.59	115	+ 9
	Bogra	11.46	14.63	127	+ 17
	Pabna	11.04	9.37	85	- 15
	Dacca	12.50	12.43	99	- 1
	Mymensingh	14.85	16.45	110	+ 10
	Faridpur	11.49	11.23	98	- 2
	Backergunge	16.31	14.18	87	- 13
East Bengal	Tippura	13.78	13.13	95	- 5
	Noakhali	22.93	22.25	97	- 7
	Chittagong	21.93	16.60	76	- 24
	Chittagong Hill Tracts	16.44	13.75	84	- 16
	Palna	11.31	8.83	78	- 22
	Gaya	11.73	8.69	74	- 26
	Shahabad	11.64	8.63	74	- 26
	Saran	11.06	7.29	66	- 34
	Champaran	12.81	12.03	94	- 6
	Manikpur	11.00	9.37	85	- 15
Bihar	Darbhanga	12.51	10.19	81	- 19
	Monghyr	11.41	8.35	73	- 27
	Bhagalpur	11.65	8.31	71	- 29
	Purnea	14.08	13.22	94	- 6
	Malda	11.07	8.43	76	- 24
	Bonhai Pargana	11.64	7.63	66	- 34
	Cuttack	12.77	12.39	97	- 3
Orissa	Balesore	11.86	9.71	82	- 18
	Puri	12.31	16.40	133	+ 33
	Hasaribagh	12.55	7.17	57	- 43
Chota Nagpur	Ranchi	12.31	10.56	86	- 14
	Palamu	12.43	5.45	44	- 56
	Manbhum	12.55	9.30	74	- 26
	Singbham	14.56	7.17	49	- 51

SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 17, 1902. 1345

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the Province for the month of August 1902:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL—							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 1st May 1901.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average rate per in. month.	Variation.	Average.	Normal average.
South-West Bengal	81°5	72°9	80°6	79°5	80°5	+1°5	19°23	21°56	—1°33	15°55	15°53	—1°02	28°43	57°14
North Bengal	81°5	72°1	80°5	78°7	80°7	+8°7	18°35	12°23	+3°66	14°07	12°22	—0°05	25°00	27°61
East Bengal	84°5	72°3	80°9	78°1	83°1	+1°0	14°31	16°14	—1°23	16°35	17°30	—1°25	25°36	57°31
River	80°3	72°9	80°7	79°4	80°1	+1°4	8°40	11°23	—3°43	21°51	12°30	—3°39	25°03	34°07
Orissa	80°4	74°1	80°5	78°3	80°9	+1°1	12°33	12°35	+0°02	15°48	15°13	+0°31	26°79	26°79
Chore Nagpur*	85°8	71°4	80°3	76°3	82°5	+1°7	7°30	12°29	—5°39	12°37	14°46	—3°17	27°45	26°07
Assam	80°9	70°5	80°9	72°6	80°8	0								

\* Purnia not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 16th September 1902.

O. LITTLE,  
Meteorological Reporter to the Govt. of Bengal.

*Official Statistics of the Districts of Bengal for the month of July 1909.*

[illegible]

*Physical Statistics of Towns in Bengal with a population of 20,000 and over during the month of July 1908.*

[illegible]

B. H. DUBE, CAPTAIN, I.M.S.,  
Off. Secy<sup>t</sup> Commissioner for Bengal.

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,  
The 13th September 1898.



IRRIGATION DEPARTMENT, BENGAL

IMMIGRATION OPERATIONS FOR THE OFFICIAL YEAR 1904-1905.

Area loaned for Irrigation up to end of July 1906.

[illegible]

The differences between the average discharges and discharges utilized are due to leakage.

↑ **Washed** for potential leaks.

3 Of this, 2,450 acres represent a provincial reserve, 800

DAMPENING,

THE 1914 BOSTONIAN 1008.

R. C. Eick:

Underway, to the Field of Anarchy

GOVERNMENT OF BENGAL, IRRIGATION DEPARTMENT.

Approximate return of traffic on the Circular and Eastern Canals for the week ending Saturday, the 13th September 1902, as compared with the corresponding week of the previous year.

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 13TH SEPTEMBER 1902.			WEEK ENDING SATURDAY, THE 14TH SEPTEMBER 1901.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
		Mds.	Rs.		Mds.	Rs.
Rice and paddy	568	88,776	1,079	537	70,100	891
Jute	159	88,276*	606	157	85,700†	574
Firewood	46	28,660	431	84	39,425	594
Other articles	598	1,20,726	1,886	512	1,23,610	1,517
Total	1,408	2,71,438	3,461	1,400	2,71,835	2,580

\* Weight by canal measurement, 37,712 mounds.  
† Ditto ditto, 37,400 "

Results of the Meteorological Observations taken at the Alipore Observatory from  
7th to 13th September 1902.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 34° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
1902.				Inches.	°	°	°	°	°	Inches.	°	%			Inches.	
Sept.	7th	106.7	4.5	29.404	84.1	91.2	11.8	79.4	81.1	1.021	79.9	87	E and N	73	0.04	Chiefly cloudy, o, d.
"	8th	116.2	NH	29.59	82.9	85.5	6.1	79.5	81.0	1.036	80.3	92	W by S and SSW	88	1.08	Cloudy, o, g, d, p, t, z.
"	9th	114.9	0.2	29.624	81.8	84.0	7.2	77.4	79.3	0.992	79.0	91	WSW, E and SSE	97	1.26	Chiefly cloudy, o, g, d, p, t, z.
"	10th	143.7	2.0	29.754	83.2	88.3	10.5	77.8	80.3	1.000	79.2	88	SSE	115	0.78	Chiefly cloudy, o, d, p, t, z.
"	11th	151.4	2.9	29.778	83.0	89.2	11.1	78.1	80.1	0.980	78.9	88	SSE	78	0.06	Chiefly cloudy, d.
"	12th	148.0	3.9	29.712	84.1	89.0	9.9	79.1	79.7	0.966	77.9	81	SSE and S by W	102	0.01	Chiefly cloudy d.
"	13th	150.0	5.7	29.726	85.4	90.8	13.4	80.4	80.4	0.972	78.4	79	S by W and S	111	NH	Partially cloudy.

The mean pressure of the seven days	29.656
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	29.658
The total number of hours of bright sunshine	20.1
The maximum possible number of hours of sunshine	86.5
The mean temperature of the seven days	83.5
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	83.2
The extreme variation of temperature	13.8
The maximum temperature	91.2
The highest velocity of the wind in one hour	9
The mean relative humidity	87
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	86
The total fall of rain from 7th to 13th September 1902	3.23
The average fall of the corresponding period for 24 years, Surveyor-General's Office	3.14
The total fall from 1st January to 13th September 1902	56.71
The average fall of the corresponding period for 24 years, Surveyor-General's Office	53.64

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from eye observations.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beekley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; t, thunder; lightning.

G. W. KÜCHLER,

for Meteorological Reporter to the Govt. of India  
and Director-General of Indian Observatories.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, 17th September 1902.

## Weekly Return of Traffic Receipts on Indian Railways

## EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 30th August 1902 on 1,913.49 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week (on per mile of railway for previous 72 weeks of half-year).	225,015	Rs. 3,34,514 8 0	46,11,299 30	Rs. 7,33,085 15 0	Rs. 24,221 0 0	Rs. 10,30,806 2 0	1,03,754	172,544	2,76,298
Total for 52 weeks.	5,291,776	Rs. 31,33,490 0 0	3,90,51,473 0	Rs. 45,12,440 0 0	Rs. 1,74,450 0 0	Rs. 92,35,196 0 0	965,287	1,486,580	3,451,867
COMPARISON.									
Total for corresponding week of previous year.	221,690	Rs. 3,45,474 12 0	50,82,446 0	Rs. 8,00,293 10 0	Rs. 20,434 10 0	Rs. 12,25,772 4 0	1,03,514	1,69,672	2,73,186
Per mile of railway corresponding week of previous year.	127 1/2	187 1/2	26,800	420 0 0	10 14 5	634 15 8	53	87	140
Total for corresponding 52 weeks of previous year.	5,513,270	Rs. 34,34,905 10 11	4,80,95,890 0	Rs. 81,00,485 5 0	Rs. 1,77,190 15 0	Rs. 1,22,94,511 16 8	905,742	1,514,940	2,420,682

(a) The decrease is chiefly in coal.  
 † Added No. of passengers 698 and Rs. 697 On account of difference between the approximate and audited figures for the week ended 25th July 1902.  
 ‡ Deducted Mds. 3,35,354 and deducted " 12,475 July 1902.  
 § Audited figures up to 25th July 1902.

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901.

Open mileage.	Period.	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total.	Per mile of Railway.	Train mileage.	
		No. of Passengers.	Rs.	Mds.	Rs.	Rs.	Rs.	Rs.	No.	Rs. a. p.
7,013.49	12 days of July	714,913	5,65,797	85,88,098	14,83,280	21,611	21,80,897	1,130	500,075	4 3 10
7,013.49	Week ended 10th July	441,135	3,70,481	47,45,389	5,02,448	14,086	13,97,512	628	289,551	4 1 6
7,013.49	" " 20th	370,307	3,70,200	42,84,015	7,01,413	18,516	11,00,115	615	279,025	3 16 1
7,013.49	" " 30th	348,190	3,47,170	41,84,050	7,14,398	22,744	10,84,748	587	294,900	3 17 1
7,013.49	" " 10th	351,538	3,48,707	46,04,390	7,13,840	22,640	10,82,560	585	278,000	3 15 2
7,013.49	" " 20th	367,674	3,66,046	41,41,045	7,10,916	19,829	10,70,500	553	305,468	4 0 7
7,013.49	" " 30th	370,307	3,69,411	41,18,487	6,98,178	19,178	10,71,214	534	288,577	3 12 1
7,013.49	" " 10th	365,013	3,56,514	40,11,570	7,53,089	25,911	11,50,630	673	282,510	3 14 9
	Totals up to date	5,291,776	31,33,490	3,90,51,473	45,12,441	1,74,450	92,35,196	965	2,421,867	4 0 1

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901—concluded.

1901.

		No. of Passengers.	Rs.	Mds.	Rs.	Rs.	Rs.	Rs.	No.	Rs. a. p.
1,913.49	15 days of July	797,925	7,32,678	1,04,70,721	18,02,791	21,750	21,80,541	1,454	540,802	4 3 10
1,913.49	Week ended 10th July	385,819	3,78,644	46,41,792	5,02,448	14,086	13,97,512	628	289,551	4 1 6
1,913.49	" " 20th	419,037	4,36,918	50,18,440	7,01,413	18,516	11,00,115	615	279,025	3 16 1
1,913.49	" " 30th	437,584	4,40,707	53,80,590	7,14,398	22,744	10,84,748	587	294,900	3 17 1
1,913.49	" " 10th	418,985	4,33,900	53,49,336	7,10,916	22,640	10,82,560	585	278,000	3 15 2
1,913.49	" " 20th	441,135	4,41,045	51,07,112	6,98,178	21,169	10,71,214	553	305,468	4 0 7
1,913.49	" " 30th	441,135	4,41,045	51,07,112	6,98,178	21,169	10,71,214	553	305,468	4 0 7
1,913.49	" " 10th	441,135	4,41,045	51,07,112	6,98,178	21,169	10,71,214	553	305,468	4 0 7
1,913.49	" " 20th	441,135	4,41,045	51,07,112	6,98,178	21,169	10,71,214	553	305,468	4 0 7
1,913.49	" " 30th	441,135	4,41,045	51,07,112	6,98,178	21,169	10,71,214	553	305,468	4 0 7
	Totals up to date	5,291,776	31,33,490	3,90,51,473	45,12,441	1,74,450	92,35,196	965	2,421,867	4 0 1

\* Audited figures.

## TAKBESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 30th August 1902 on 82.83 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week (on per mile of railway for previous 72 weeks of half-year).	17,301	Rs. 4,518 8 0	23,409 21	Rs. 141 3 0	Rs. 5 0 0	Rs. 4,901 11 0	1,086	173	1,259
Total for 52 weeks.	104,026	Rs. 44,250 0 0	1,24,670 00	Rs. 6,320 0 0	Rs. 25 0 0	Rs. 44,285 15 0	9,510	1,368	10,878
COMPARISON.									
Total for corresponding week of previous year.	18,503	Rs. 4,838 14 7	4,468 10	Rs. 528 11 0	Rs. 9 10 0	Rs. 4,718 4 1	1,098	180	1,278
Per mile of railway corresponding week of previous year.	224 0 0	56 1 1	54 0 0	6 4 0	0 7 0	58 1 5 0	13 1 0	2 1 0	15 2 0
Total for corresponding 52 weeks of previous year.	124,000	Rs. 44,285 11 3	76,814 00	Rs. 2,339 14 0	Rs. 70 0 0	Rs. 44,784 0 0	9,507	1,367	10,874

\* Added No. of passengers 1,200 and Rs. 321 On account of difference between the approximate and audited figures for the week ended 25th July 1902.  
 † Added Mds. 4,447 and " 133 July 1902.  
 ‡ Deducted " 3  
 § Audited figures up to 25th July 1902.

## 2803.

*Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901.*

Open the Month.	Period.	Coaching Traffic.		Merchandise and Mineral Traffic.		Other traffic.	Total.	Per mile of railway.	Train mileage.	
		No. of passengers.	Rs.	Mds.	Rs.	Rs.	Rs.	Rs.	No.	Rs.
1st-12	12 days of July	40,001	10,050	72,667	1,575	10	11,634	255	2,565	6 1/2
13-23	Week ended 23rd July	31,457	9,252	16,932	403	10	7,312	239	1,325	2 1/2
24-31	" " 31st "	28,867	8,367	19,045	504	7	4,897	204	2,705	2 1/2
1st-23	" " 23rd August	19,740	4,087	12,086	323	5	4,457	151	1,188	2 1/2
24-31	" " 31st "	16,464	4,717	17,009	509	7	5,683	203	1,184	2 1/2
1st-31	" " 31st "	18,606	5,791	18,246	504	4	5,100	229	1,185	2 1/2
1st-31	" " 31st "	17,846	4,187	13,318	591	1	4,766	214	1,185	2 1/2
1st-31	" " 31st "	17,381	4,319	23,510	661	5	4,978	231	1,185	2 1/2
	Totals up to date	198,498	51,392	1,04,517	8,230	58	69,480	328	10,639	6 1/2

*Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901—concluded.*

[illegible]

\* Audited figures.

*Approximate Return of Traffic for week ended 30th August 1902 on 182.74 miles open.*

	COACHING TRAFFIC.		PASSENGER AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TONN-MILES RAIL.		
	No. of Passengers.	Coaching Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	17,740	Rs. A. P. 18,947 3 0	Mins. S. 58,325 30	Rs. A. P. 19,065 7 0	Rs. A. P. 20 6 0	Rs. A. P. 20,811 10 0	5,894	4,673	10,567
Per mile of railway ...	...	98 4 0	...	97 4 8	0 3 0	145 14 1	...	...	...
For previous 14 weeks of half-year	171,586	1,43,804 1 5 0	11,51,048 20 7	77,104 8 4	434 0 0	1,50,810 0 0	85,504	50,815	1,36,319
Total for 14 weeks ...	164,545	1,59,332 1 0	13,14,814 19	88,047 15 0	305 0 0	1,47,738 0 0	75,976	41,454	1,17,430
COMPARISON.									
Total for corresponding week of previous year.	16,678	18,511 0 0	72,947 31	5,785 0 10	55 0 6	24,306 7 4	5,844	5,574	11,418
Per mile of railway for corresponding week of previous year.	...	102 6 5	...	55 12 7	0 5 5	186 8 3	...	...	...
Total for corresponding 14 weeks of previous year.	160,810	1,59,478 0 5	14,18,908 0	1,00,707 19 5	404 8 0	1,60,810 2 7	75,334	50,414	1,25,748

* Added	No. of passengers 27	and	\$ 3.91	} (in account of difference between the approximate and audited figures for the week ended 26th July 1900)
* Do.	tonnage 9,233	and	" 996	
* Included			" 18	
* Audited figures up to 26th July 1900.				

1802.

*Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901.*

Time mileage.	Period.	Coach and Traffic.		Merchandise and M. and M. Traffic.		Other earnings.	Total.	Per mile of railway.	Train mileage.	
		Number of Passengers.	Rs.	Mds.	Rs.	Rs.	Rs.	Rs.	No.	Rate.
1887-88	18 days of July	40,000	38,001	1,47,000	18,001	50	61,001	0.19	22,000	2.5
1888-89	Week ended 10th "	22,511	17,002	5,00,410	15,304	40	22,373	0.04	15,000	2.0
1889-90	" " 20th "	20,000	22,107	1,00,000	8,000	30	31,000	0.10	10,000	2.0
1890-91	" " 2nd Aug.	20,000	19,000	8,000	8,000	01	37,001	0.07	15,000	2.0
1891-92	" " 1st "	21,000	17,000	27,000	8,000	40	37,000	0.10	15,000	2.0
1892-93	" " 10th "	20,000	17,000	10,000	8,000	00	35,000	0.08	15,000	2.0
1893-94	" " 20th "	19,000	16,000	7,000	8,000	00	30,000	0.08	15,000	2.0
1894-95	" " 30th "	17,000	15,000	85,000	10,000	00	32,000	0.06	15,000	2.0
	Total up to date	100,000	1,00,000	12,10,000	80,000	500	1,07,500	0.10	110,000	2.0

Abstract of progressive weekly returns of all earnings for 1903 in comparison with 1901—concluded.

		Number of		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.	
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\* A vetted source.

## SOUTH BEHAR RAILWAY.

Approximate Return of Traffic for week ended 30th August 1902 on 78.76 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Traffic for the week ...	1,000	1,445 6 0	32,255 0	1,325 10 0	19 0 0	7,700 2 0	1,329	1,447	2,776
... for mile of railway ...	57,134	67,312 1 0	2,76,541 80†	17,067 16 0†	128 2 2	64,536 0 0	18,054	6,440	24,494
Total for 54 weeks ...	94,061	12,707 7 0	1,49,977 80	19,399 11 0	169 0 0	72,395 2 0	18,087	7,900	25,987
COMPARISON.									
Total for corresponding week of previous year ...	10,380	1,616 5 3	39,040 10	1,312 3 0	14 8 0	7,642 6 2	9,117	1,000	10,117
... for mile of railway corresponding week of previous year ...	—	71 5 0	—	23 0 2	0 3 10	94 8 0	—	—	—
Total for corresponding 54 weeks of previous year ...	102,777	12,907 2 1	1,50,104 0	19,399 5 0	168 5 5	72,616 11 2	18,087	11,104	29,191

\* Added No. of passengers 840 and deducted 4,716 and added 4,716. On account of difference between the approximate and audited figures for the week ended 18th July 1902.

† Audited figures up to 30th July 1902.

1902.

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901.

Date.	Period.	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total.	Per mile of railway.	Train mileage.	
		Number of passengers.	Rs.	Mds.	Rs.				No.	Rate.
1902	12 days of July ...	21,554	12,310	30,697	4,278	40	18,425	218	6,981	2 5 3
1901	Week ended 19th "	12,511	6,851	30,428	2,124	5	8,794	111	3,678	2 4 1
1902	" " 20th "	11,734	4,804	41,404	2,545	5	8,251	105	3,626	2 14 7
1901	" " 21st "	10,914	5,855	35,815	2,185	10	7,754	89	3,914	2 10 7
1902	" " 22nd "	10,336	5,073	31,646	1,846	10	7,001	87	3,535	2 11 2
1901	" " 23rd "	9,778	5,549	26,186	2,045	10	7,681	87	3,856	2 11 2
1902	" " 24th "	9,189	5,700	17,473	1,924	10	7,100	99	3,444	2 8 5
1901	" " 25th "	8,983	5,405	22,359	2,363	10	7,180	99	3,594	2 4 10
	Totals up to date ...	94,061	12,707	1,49,977	19,399	169	72,395	106	24,992	2 14 8

Abstract of progressive weekly returns of all earnings for 1902 in comparison with 1901—concluded.

1901.

Date.	Period.	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total.	Per mile of railway.	Train mileage.	
		No. of passengers.	Rs.	Mds.	Rs.				No.	Rate.
1902	12 days of July ...	21,554	12,310	30,697	4,278	40	18,425	218	6,981	2 5 3
1901	Week ended 19th "	12,511	6,851	30,428	2,124	5	8,794	111	3,678	2 4 1
1902	" " 20th "	11,734	4,804	41,404	2,545	5	8,251	105	3,626	2 14 7
1901	" " 21st "	10,914	5,855	35,815	2,185	10	7,754	89	3,914	2 10 7
1902	" " 22nd "	10,336	5,073	31,646	1,846	10	7,001	87	3,535	2 11 2
1901	" " 23rd "	9,778	5,549	26,186	2,045	10	7,681	87	3,856	2 11 2
1902	" " 24th "	9,189	5,700	17,473	1,924	10	7,100	99	3,444	2 8 5
1901	" " 25th "	8,983	5,405	22,359	2,363	10	7,180	99	3,594	2 4 10
	Totals up to date ...	102,777	12,907	1,50,104	19,399	168	72,616	146	29,274	2 7 4

\* Audited figures.

## BENGAL CENTRAL RAILWAY COMPANY, LIMITED.

Approximate Return of Traffic and Mileage for the week ended 30th August 1902 on 137 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Traffic for the week ...	24,000	11,394 0 0	1,30,459 0	17,384 0 0	74 0 0	30,302 0 0	3,364	4,516	7,880
... for mile of railway ...	273,731	1,06,123 0 0	4,42,465 0	47,543 0 0	1,235 0 0	1,07,601 0 0	24,263	32,687	56,950
Total for 5 weeks ...	120,361	1,19,358 0 0	2,20,987 0	46,877 0 0	1,200 0 0	1,06,623 0 0	29,717	37,175	66,892
COMPARISON.									
Total for corresponding week of previous year ...	20,345	12,364 0 0	1,54,864 0	20,370 0 0	6,271 0 0	49,704 0 0	2,877	7,234	10,111
... for mile of railway corresponding week of previous year ...	220	96 0 0	1,000 0	120 0 0	40 0 0	316 0 0	—	—	—
Total for corresponding 5 weeks of previous year ...	102,743	1,17,913 0 0	2,07,107 0	1,07,930 0 0	23,700 0 0	1,47,643 0 0	27,550	39,401	66,951

\* Audited up to first 12 days of July 1902.

† Coaching traffic calculated on 137 miles only.

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., K.-D., DACCA, AND ASSAM-BREAR SECTIONS.)

Approximate Return of Traffic and Mileage for the week ended 30th August 1902 on 861 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAFFIC-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	808,680	Rs. 100,000 0 0	Mds. 15,77,300 0	Rs. 2,01,480 0 0	Rs. 60,000 0 0	Rs. 1,61,480 0 0	27,980	46,284	74,264
Or per mile of railway	939	117 0 0	1,805 0	230 0 0	69 0 0	1,614 0 0	...	...	...
For previous 5 weeks of half-year	3,705,450	7,00,500 0 0	67,69,500 0	12,55,500 0 0	50,000 0 0	11,30,100 0 0	100,404	204,512	304,916
Total for 5 weeks	1,206,470	2,37,500 0 0	52,40,150 0	15,00,000 0 0	1,24,000 0 0	31,61,000 0 0	200,404	200,500	400,904
COMPARISON.									
Total for corresponding week of previous year	1,08,156	66,974 0 0	15,30,000 0	9,94,412 0 0	83,000 0 0	4,58,000 0 0	27,084	46,124	73,208
Per mile of railway corresponding week of previous year	126	77 0 0	1,762 0	230 0 0	70 0 0	614 0 0	...	...	...
Total to corresponding date of previous year	1,572,001	3,25,302 0 0	27,71,000 0	12,10,300 0 0	1,04,000 0 0	25,51,154 0 0	227,607	184,150	411,757

\* Excluding ferry earnings.

## BRAHMAPUTRA-SULTANPUR RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 30th August 1902 on 35.97 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAFFIC-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	5,700	Rs. 1,700 0 0	Mds. 44,300 0	Rs. 5,140 0 0	Rs. 0 0 0	Rs. 1,700 0 0	1,016	1,004	2,020
Or per mile of railway	157	47 0 0	1,230 0	143 0 0	0 0 0	1,700 0 0	...	...	...
For previous 5 weeks of half-year	21,110	15,300 0 0	2,16,770 0	20,000 0 0	370 0 0	30,300 0 0	2,620	2,370	4,990
Total for 5 weeks	86,800	17,100 0 0	7,01,000 0	25,000 0 0	400 0 0	40,500 0 0	2,640	2,300	4,940
COMPARISON.									
Total for corresponding week of previous year	5,000	1,000 0 0	50,000 0	3,700 0 0	60 0 0	5,700 0 0	700	1,100	1,800
Per mile of railway corresponding week of previous year	110	28 0 0	1,400 0	100 0 0	1 0 0	570 0 0	...	...	...
Total to corresponding date of previous year	24,200	15,000 0 0	2,37,100 0	20,000 0 0	200 0 0	30,300 0 0	7,000	11,000	18,000

\* Corrected as per revised statement furnished by Engineer-in-Chief for the half-year ending June 1902, 15 miles of line at Fatchhari hitherto treated as siding is now being treated as main line.

## MYMENSINGH-JAGANNATHGANJ RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 30th August 1902 on 53.57 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAFFIC-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	8,000	Rs. 2,000 0 0	Mds. 50,000 0	Rs. 1,200 0 0	Rs. 0 0 0	Rs. 2,000 0 0	1,200	500	1,700
Or per mile of railway	150	37 0 0	930 0	22 0 0	0 0 0	370 0 0	...	...	...
For previous 5 weeks of half-year	35,000	10,000 0 0	1,25,000 0	1,200 0 0	200 0 0	11,200 0 0	2,700	7,000	9,700
Total for 5 weeks	20,000	10,000 0 0	1,07,000 0	7,000 0 0	200 0 0	17,200 0 0	10,000	7,000	17,000
COMPARISON.									
Total for corresponding week of previous year	7,000	1,000 0 0	47,000 0	1,200 0 0	20 0 0	2,200 0 0	1,100	500	1,600
Per mile of railway corresponding week of previous year	130	19 0 0	870 0	22 0 0	0 0 0	220 0 0	...	...	...
Total to corresponding date of previous year	26,000	17,000 0 0	1,20,000 0	8,000 0 0	200 0 0	25,000 0 0	9,000	6,000	15,000

## DACCA STATE RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 30th August 1902 on 56 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. L.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week on 56 miles of railway	28,840	16,570 0 0	68,640 0	4,178 0 0	300 0 0	14,970 0 0	2,778	1,180	4,208
For previous 5 weeks of half-year	403	138 0 0	705 0	48 0 0	3 0 0	174 0 0	...	...	...
Total for 5 weeks	29,243	16,708 0 0	69,345 0	4,226 0 0	303 0 0	15,144 0 0	2,803	1,180	4,263
COMPARISON.									
Total for corresponding week of previous year	21,850	7,940 0 0	61,183 0	1,620 0 0	644 0 0	10,204 0 0	2,366	1,618	4,444
For miles of railway corresponding to week of previous year	304	28 0 0	904 0	48 0 0	5 0 0	185 0 0	...	...	...
Total to corresponding date of previous year	214,317	62,161 0 0	1,86,770 0	25,308 0 0	5,240 0 0	30,856 0 0	30,916	16,790	44,406

## COOCH BEHAR STATE RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 30th August 1902 on 33.78 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (including ferry).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. L.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week on 33.78 miles of railway	1,330	710 0 0	16,850 0	1,178 0 0	30 0 0	1,208 0 0	280	1,400	2,680
For previous 5 weeks of half-year	80	21 0 0	321 0	36 0 0	...	36 0 0	...	...	...
Total for 5 weeks	1,410	731 0 0	17,171 0	1,214 0 0	30 0 0	1,244 0 0	280	1,400	2,720
COMPARISON.									
Total for corresponding week of previous year	1,984	600 0 0	12,357 0	1,305 0 0	171 0 0	1,676 0 0	375	381	756
For miles of railway corresponding to week of previous year	87	29 0 0	308 0	38 0 0	1 0 0	39 0 0	...	...	...
Total to corresponding date of previous year	17,739	8,601 0 0	63,867 0	8,784 0 0	1,169 0 0	9,953 0 0	2,054	4,637	6,691

Ballast train-miles, 1,678.

## BENGAL AND NORTH-WESTERN RAILWAY.

Approximate Return of Traffic for the week ending 30th August 1902 on 1,361 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steamboat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 1,361 miles open	167,460	(a) 62,170	5,06,630	(b) 66,880	18,430	(c) 1,37,440	40,190	(d) 22,180	72,370
For miles of railway open for previous 5 weeks of half-year	1,672,730	5,78,700	43,96,180	4,77,470	1,36,740	11,70,970	317,290	240,840	657,640
Total for 5 weeks	1,840,190	6,41,300	49,02,810	5,44,350	1,65,170	13,17,460	357,480	262,820	620,300
COMPARISON.									
Total for corresponding week of previous year on 1,231 miles open	168,220	76,402	5,40,160	66,781	16,427	1,39,609	34,605	(e) 25,465	60,070
For miles of railway corresponding to week of previous year	136,721	61,300	476,960	49,800	13,115	1,25,215	...	...	...
Total to corresponding date of previous year	1,636,909	6,19,672	61,66,517	6,07,412	1,60,445	13,80,067	308,630	269,030	577,660

(a) Decrease due to Akodhya shifts held in the corresponding week of the previous year. It was held on the 18th August this year.  
 (b) The weight and amount of ballast trains included in this week were 50,000 and Rs. 2,000, against 45,000 and Rs. 13,678 in the corresponding week of the previous year. The decrease in goods earnings is on ballast trains, though there are small increases in passenger and other earnings.  
 (c) Includes 7,316 miles of ballast train miles run on open line.  
 (d) 7,100



## ASSAM-BENGAL RAILWAY.

*Approximate Return of Traffic for the week ended 30th August 1902 on 558 miles open for all descriptions of traffic, and additional 31 miles for goods and parcels traffic only.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	No. of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. & P.	Mds. & P.	Rs. & P.	Rs. & P.	Rs. & P.			
Total traffic for the week	24,379	14,408 0 0	1,78,945 0	18,094 0 0	1,781 0 0	31,380 0 0	8,537	3,368	11,905
Or per mile of railway	43.73	25.78	319.81	32.45	3.19	56.24	11.70	13.04	24.74
For previous 5 weeks of half-year	217,081	1,28,345 0 0	15,48,405 0	1,14,035 0 0	9,921 0 0	2,54,303 0 0	50,008	20,871	70,879
Total for 5 weeks	243,110	1,42,751 0 0	16,27,350 0	1,25,790 0 0	11,073 0 0	2,85,143 0 0	58,536	24,242	82,778
COMPARISON.									
Total for corresponding week of previous year	26,243	15,039 0 0	1,68,405 0	18,145 0 0	2,397 0 0	34,883 0 0	6,100	4,100	10,200
Per mile of railway corresponding week of previous year	47.44	26.18	304.74	31.70	4.45	62.12	10.95	10.97	21.92
Total to corresponding date of previous year	1,51,790	1,37,418 0 0	17,77,706 0	1,44,733 0 0	12,136 0 0	2,90,883 0 0	47,504	23,781	71,285

## FINANCIAL YEAR.

*Approximate Statement of Gross Receipts of the Assam-Bengal Railway.*

RECEIPTS FOR WEEK ENDING 30th AUGUST 1902.			RECEIPTS FOR WEEK ENDING 5th AUGUST 1901.			TOTAL RECEIPTS FROM 1st APRIL 1902 TO 30th AUGUST 1902.			TOTAL RECEIPTS FROM 1st APRIL 1901 TO 31st AUGUST 1901.			Total increase in 1902.	Total decrease in 1901.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Rs.	P.
	Rs.			Rs.			Rs.			Rs.			
31,380	45.74	674	24,380	50.13	508	7,410	...	...	3,451	...	...	...	78.63

## SEGOWLIE-BAKSAUL BRANCH RAILWAY.

(WORKED BY THE B. & N. W. RAILWAY.)

*Approximate Return of Traffic for the week ending 6th September 1902 on 15 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Passengers carried.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
	No.	Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 15 miles open	1,838	348	18,617	582	6	816	427	27	454
Or per mile of railway	122.53	23.20	1240.45	38.80	0.40	54.40	...	...	...
For previous 5 weeks of half-year	11,778	1,856	95,357	1,858	61	3,184	2,800	816	3,616
Total for 5 weeks	13,616	1,784	77,964	2,137	67	3,908	3,227	843	4,070
COMPARISON.									
Total for corresponding week of previous year on 15 miles open	1,863	340	7,180	183	10	803	427	77	504
Per mile of corresponding week of previous year	124.20	22.67	478.67	12.20	0.67	53.53	...	...	...
Total to corresponding date of previous year	84,016	3,408	72,721	2,163	108	7,895	4,173	831	5,004

BENGAL GENERAL RAILWAY COMPANY, LIMITED.

Approximate Return of Traffic and Mileage for the week ended 6th September 1902 on 189 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mts. A.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	44,548	13,417 0 0	1,58,003 0	20,300 0 0	80 0 0	53,047 0 0	2,334	8,320	10,654
per mile of railway ...	235	70 0 0	836 0 0	106 0 0	0 0 0	281 0 0	12	44	56
for previous 9 weeks of half-year ...	379,648	1,19,636 0 0	5,79,022 0	60,577 0 0	1,503 0 0	1,80,583 0 0	29,083	28,127	57,210
Total for 10 weeks ...	424,196	1,33,053 0 0	7,37,025 0	80,877 0 0	1,583 0 0	2,30,766 0 0	31,417	36,447	67,864
Comparison.									
For corresponding week of previous year ...	40,067	11,908 0 0	1,43,800 0	20,721 0 0	141 0 0	32,770 0 0	1,000	6,364	7,364
per mile of railway corresponding week of previous year ...	205	63 0 0	830 0 0	106 0 0	0 0 0	242 0 0	12	44	56
Total for corresponding date of previous year ...	383,808	1,26,801 0 0	5,71,002 0	71,442 0 0	1,501 0 0	2,99,546 0 0	30,777	28,320	59,097

\* Audited up to week ending 18th July 1902.  
† Coaching traffic calculated on 180 miles only.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

		Rs. A. P.	Rs. A. P.
Approximate earnings for the week ending 6th Sept. 1902 ...	Coaching ...	4,358 0 0	16,086 0 0
	Goods ...	11,165 0 0	
	Other earnings ...	63 0 0	
Audited earnings for the corresponding period of 1901 ...	Coaching ...	6,381 0 0	15,783 0 0
	Goods ...	9,322 0 0	
	Other earnings ...	79 0 0	
	Increase ...		303 0 0
Receipts per mile for the week ending 6th Sept. 1902 ...			315 6 7
Ditto for the corresponding period of 1901 ...			309 7 4
	Increase ...		5 15 1
Receipts from 1st July to 6th Sept. 1902 ...			1,31,062 0 0
Ditto for the corresponding period of 1901 ...			1,37,971 0 0
	Decrease ...		6,909 0 0



# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, OCTOBER 1, 1902.

## OFFICIAL PAPERS.

[Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of five rupees per annum if delivered in Calcutta, or seven rupees and eight annas if sent by post.]

### CONTENTS.

	Page		Page
Resolution on the Triennial Report on the Administration of the Registration Department in Bengal for the years 1899-1900, 1900-1901 and 1901-1902	1394	Circular and Eastern Canal for the week ending Saturday the 27th September 1902	1394
Weather and Crop Report for the week ending 25th September 1902	1395	Results of the Meteorological Observations taken at the Alipore Observatory from 21st to 27th September 1902	1395
Statement showing heights over mean sea-level and low water in the rivers Ganges, Bhagirathi, Jalangi and Brahmaputra for the month of August 1902	1395	Bengal-Nagpur Railway during the month of June 1902	1395
		Weekly Return of Traffic Receipts on Indian Railways	1395

## RESOLUTION ON THE TRIENNIAL REPORT ON THE ADMINISTRATION OF THE REGISTRATION DEPARTMENT IN BENGAL FOR THE YEARS 1899-1900, 1900-1901 AND 1901-1902.

RESOLUTION—No. 1315P.—D.

REGISTRATION.

Dated Darjeeling, the 27th September 1902.

READ—

The Triennial Report on the Administration of the Registration Department for the years 1899-1900, 1900-1901, and 1901-1902.

Read also—

The Triennial Report on the Administration of the Registration Department for the years 1896-97, 1897-98, and 1898-99, and the Resolution of Government recorded thereon.

Read also—

The Statistical Returns for the years 1899-1900 and 1900-1901.

THIS is the first Triennial Report submitted to Government after the issue of the orders contained in Home Department letter No. 2741, dated the 26th March 1901, for the curtailment of annual reports, and it has been prepared by the Hon'ble Mr. Tarini Kumar Ghose, who took charge of the Registration Department from Khan Bahadur Delawar Hossain Ahmed on the 5th April 1900. Only eight statistical tables, prescribed by the Government of India, have been appended to this report, but some additional information is

furnished in five statements which are intended for the Bengal Government only.

2. Steady progress has been made during the triennium in the operations of the Registration Department. The number of offices has risen yearly since 1887, and there are now 442 offices open for the registration of documents; only seven of these do not yet pay their way, but their progress is being carefully watched, and some of them are retained in spite of the loss on their working for the convenience of isolated tracts or for the encouragement of registration in backward districts. The receipts of the department increased very largely in the last triennium, and the increase has been well maintained during the period under review, the figures for 1901-1902 being the highest yet reached. Inasmuch as by far the greatest portion of the expenditure is in the shape of commission, the cost of the department has risen in only a slightly less ratio than the receipts; in his present report the Inspector-General has omitted to include the expenses and receipts of his own office and that of the Registrar of Companies, but, even allowing for the expenditure on these, the surplus during the triennium and during the last year is higher than it has ever been before. The ordinary items of expenditure remain proportionately constant, but the expenditure on sadar registration offices finds no place in these accounts; hitherto these offices have formed part of the district offices and have been held in the same buildings; but with the increase of district work there is a growing demand for more accommodation in the Collectorate offices, and the time has come when separate buildings will have to be more frequently provided for registration offices, and, considering the large profits made by registration, it is only fair that these buildings should be a charge on that department.

3. The growing recognition of the benefits of registration is gauged not only by the larger number of offices open, but also by the increase in the number of optional registrations. The famine of 1897 caused an immense increase in the number of mortgages of immoveable property under the value of Rs. 100 and in the number of obligations for the payment of money; the circumstances were exceptional and there was a sharp fall in the next three years; but the total number of optional registrations has risen steadily during the period under review, and is now very considerably in excess of the numbers in the years preceding the famine.

4. The statistics of registration throw a side-light on the condition and tendencies of the people, and they are valuable from that point of view. The most important figures are those for the sale of immoveable property, and the registration of these deeds is compulsory. In 1895-96 the number of such transactions affecting property of the value of Rs. 100 and upwards was 90,237; in 1897-98 it rose to 116,862, but fell again in the following year; since 1899-1900 the number has steadily risen, and in the last year of the triennium it was 130,243. But an examination into the details of the figures does not support the obvious interpretation that the holders of large estates are being impoverished and forced to sell; the explanation would appear to be that the value of land has risen and brought into this category a number of petty holdings the value of which in former years would have been under Rs. 100. Roughly, the classes of estates that come under this head are—

- |                              |                                      |
|------------------------------|--------------------------------------|
| (1) Revenue-paying estates.  | (4) Intermediate tenures.            |
| (2) Shares in these.         | (5) Raiyati holdings at fixed rates. |
| (3) Revenue-free properties. | (6) Others.                          |

The following table shows the number of sale transactions affecting these classes registered in the years 1894-95, 1897-98, and 1901-1902:—

	1894-95.	1897-98.	1901-1902.
Revenue-paying estates	2,017	2,134	1,105
Shares in revenue-paying estates	13,205	13,613	13,643
Revenue-free estates	8,111	7,221	8,252
Intermediate tenures	51,566	56,483	46,622
Raiyati holdings at fixed rates	49,398	59,870	33,469
Others	25,690	29,525	27,281

The number of such transactions is fairly constant and shows no tendency to increase; on the contrary, there has been a noticeable decrease during the last triennium in the number of whole estates, intermediate tenures, and raiyati holdings at fixed rates sold; there are no details given from which the relative price of land in these years can be worked out, but the value of holdings at fixed rates has considerably risen. In 1894 these holdings were sold at an average of 12·2 years' purchase; since then the price has gone up, and in 1902 the average is 22 years' purchase. There is a tendency to a decline in the number of purchases made by mahajans, while the other classes of purchasers remain proportionately constant. These figures can give rise to no anxiety as to the condition of the landholders of the Province; far from any signs of deterioration being apparent, they are evidently more than maintaining their position.

5. As the total of these classes in the last year shows a considerable decrease as compared with the other years, the increase in the total number of transactions affecting immoveable property above the value of Rs. 100 must, it would seem, be at all events partially due to the rise in value of raiyati holdings with occupancy rights and the consequent inclusion of some of these in this category. The increase in the number of transactions affecting this class has been most marked of recent years; in 1894-95 the number was 145,805; in 1901-1902 it had risen to 239,489. The average value has risen from 13 years' purchase in the former year to 19 years' purchase in the last year; the value seems extraordinarily high in Gaya and Ranchi. The districts where these transactions are most common are Midnapore, Mymensingh, Tippera, Muzaffarpur and Puri; the increase is common to nearly all the districts, but is most marked in Orissa, and is least in the Rajshahi Division. The number of mahajan purchasers has slightly increased in these years, but in proportion to the number of these transactions the number of such purchasers has certainly decreased; the number of landlord and other purchasers has remained fairly constant, and the great increase has been in the number of raiyat purchasers. These have increased from 109,806 in 1894-95 to 179,418 in 1901-1902. The large increase in the number of raiyat purchasers negatives the explanation that the raiyats as a body have been hard pressed and forced to sell their holdings, nor would this explanation fit in with the rise in the value of these holdings. The truth seems to be that the activity of the Settlement Department has awakened the raiyats in many parts to the fact that they possess these rights and that they are of value; the custom of allowing their transfer has been established by the settlement operations or has grown up, and the more improvident raiyats have eagerly realised this new-found asset for which they can obtain a good price from more provident persons. The facts are engaging the attention of the Revenue authorities, but, so far as these figures are concerned, they give every cause for satisfaction as regards the condition of the general body of raiyats.

6. On the other hand, mortgages of immoveable property of the value of Rs. 100 and upwards have steadily increased during the triennium; the increase is spread over almost all the districts. The registration of these is compulsory under the law, but there is reason to believe that it is only comparatively recently that the mahajan has found it necessary to comply with the law, owing to the fact that an unregistered mortgage is not accepted by the Settlement authorities, and to the fact that his personal influence over the raiyat is on the decline. For this latter reason it is reported that in many cases the mahajan will no longer accept a simple note of hand, but requires some tangible security, and this no doubt accounts for the rise in the number of mortgages on property valued at less than Rs. 100. At first sight it would appear that, if this explanation is correct, the number of obligations for the repayment of money registered should decrease; but the registration of these is optional, and if the personal hold of the mahajan over the raiyat is less than before, it would be natural for him to register these obligations as an additional security. On the whole, then, the registration statistics as far as they go give no cause for dissatisfaction as regards the condition of the landholders or raiyats in this Province, except the large increase in the transfers of occupancy rights, and the fact that by far the largest number of purchasers of these are themselves raiyats considerably lessens the anxiety on that score.

7. The remaining operations of the Department do not require much comment; the number of leases of all terms has steadily increased, and there appears to be no ground at present for the opinion that the increase in the duty on perpetual leases has stopped their execution. The Lieutenant-Governor again notes with regret that the number of inspections both by the Inspector-General and the Special Inspectors is not satisfactory. It is of the utmost importance to the proper working of the Department that as many different offices as possible should be regularly and periodically inspected. It is not clear how many of the 314 inspections were second inspections of the same office, but the Lieutenant-Governor wishes to impress on the Inspector-General the absolute necessity of inspecting as many offices as possible himself, and seeing that the rest are inspected each at reasonable intervals by the three Inspectors.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Inspector-General of Registration, for information and guidance.

Ordered also that a copy of the Resolution, together with a copy of the Report, be submitted to the Government of India, in the Home Department, for information.

Ordered also that the Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal.

C. E. BUCKLAND,

*Chief Secretary to the Govt. of Bengal.*

WEATHER AND CROP REPORT.

For the week ending the 29th September 1902.

**Burdwan.**—Rainfall at Sadar 1·87, Kalna 1·82, Katwa 1·81, Raniganj 1·71. Weather fine. Harvesting of *aus* still continues. More rain wanted. Fodder and water sufficient. No cattle-disease. Common rice sells at 11 seers per rupee.

**Birbhum.**—Rainfall at Sadar 2·25, Rampur Hat 1·80. Weather fair. Crops thriving. Common rice sells at 12½ seers per rupee. Fodder sufficient.

**Bankura.**—Rainfall at Sadar 2·80. Standing crops doing well. Fodder and water sufficient. Common rice sells at 13 seers per rupee.

**Midnapore.**—Rainfall at Sadar 2·16, Contai 2·11, Tamluk 1·73, Ghatal 1·03. Weather hot and cloudy. Harvesting of *aus* continues. Agricultural prospects good, but more rain wanted in parts of Sadar. Fodder and water sufficient. Cattle-disease reported from Binpur thana. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	12 8	} per rupee.
Contai	...	12 0	
Tamluk	...	11 0	
Ghatal	...	12 0	

**Hooghly.**—Rainfall at Sadar 1·55, Serampore 2·59, Arambagh 1·52. Weather seasonable. Weeding of *aman* and steeping of jute continues. Prospects of standing crops good. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	10 0	} per rupee.
Serampore	...	10 3	
Arambagh	...	11 1	

**Howrah.**—Rainfall at Sadar 0·78, Uluberia 0·89. Fall general. The outturn of the *aus* paddy has been average. The *aman* crop doing well. Cutting and steeping of jute continues. No cattle-disease. Fodder and water sufficient. Rice sells at 11 seers per rupee everywhere within the district.

**24-Parganas.**—Rainfall at Sadar 0·64, Barasat 2·58, Basirhat 2·12, Diamond Harbour 1·52. Rain moderate. Weather clearing up. State and prospects of crops good. More rain wanted in Diamond Harbour. *Aus* and jute still being harvested. Lands being prepared for the *rabi* crops in Basirhat. Condition of cattle good. Supply of fodder and water sufficient. Common rice sells at 11 seers in Sadar and Barasat; 10½ to 10¾ seers in other subdivisions.

**Nadia.**—Rainfall at Sadar 2·31, Kustia 4·95, Chuadanga 3·03, Meherpur 2·92, Ranaghat 1·99. Prospects improved by recent rain. Steeping of jute going on. Sugarcane coming up well. No cattle-disease reported. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	12 8	} per rupee.
Kustia	...	11 0	
Chuadanga	...	11 4	
Meherpur	...	13 5	
Ranaghat	...	12 0	

**Murshidabad.**—Rainfall at Sadar 1·96, Kandi 2·82, Jangipur 4·90, Lalbagh 6·50. Weather seasonable. Prospects of *aman*, jute and sugarcane good. Jute being cut and steeped at Jangipur. The sowing of *rabi* crop continues. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	11 8	} per rupee.
Kandi	...	13 12	
Jangipur	...	12 0	
Lalbagh	...	11 0	

**Jessore.**—Rainfall at Sadar 1·45, Jhenida 2·84, Magura 7·48, Narail 4·25, Bangaon 1·27. Weather seasonable. Prospects of crops good. Fodder and water sufficient. Cattle-disease reported from Salikha outpost in Magura subdivision. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	12 0	} per rupee.
Jhenida	...	12 0	
Magura	...	11 0	
Narail	...	11 8	
Bangaon	...	13 0	

**Khulna.**—Rainfall at Sadar 3·20, Bagerhat 5·13, Satkhira 3·28. Weather seasonable. Transplantation of *aman* completed. Transplantation and sowings estimated at 100 per

cent., doing well. State of coconut favourable. Fodder and water sufficient. Cattle-disease reported from Khulusa, Dumuria, and Fakirhat. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	11 54	} per rupee.
Bagerhat	...	11 10	
Patna	...	10 8	

Rajshahi.—Rainfall at Sadar 5.65, Nator 3.40, Nangaon 4.67. Weather seasonable. Harvesting of jute and transplantation of *aman* completed. Prospects of crop very good. Common rice selling at 12½ seers per rupee.

Dinajpur.—Rainfall at Sadar 8.48. Fall in the district general, varying from 16.40 to 3.25. Weather mostly gloomy. Standing crops good. Steeping of jute continues. Cattle-disease reported from two thanas. Fodder and drinking-water plentiful. Rice selling at 12 seers at Sadar and 13 seers at Thakurgaon per rupee.

Jaipur.—Rainfall at Sadar 17.01, Alipore Duars 14.48. Fall general. Weather rainy with easterly high wind. Prospect of standing *haimanti* paddy favourable. Steeping of jute going on. Common rice sells at 11 seers a rupee. Fodder and water sufficient.

Darjeeling.—Rainfall at Sadar 20.42, Kurseong 19.21, Siliguri 23.58. Weather terribly wet. Hills—*Haimanti dhan*, *bora* and *chhota muru* doing well. Terai—Transplanting of *haimanti* paddy finished. Reaping of jute and *dhadoi* going on. Prospects good. Coarse rice sells as follows:—

	Srs.	ch.	
Hills	...	8 0	} per rupee.
Terai	...	9 0	

Maize sells at Darjeeling at 20 seers and at Kalimpong at 34 seers per rupee.

Rangpur.—Rainfall at Sadar 9.32, Gaibanda 8.37, Nilphamari 9.18, Kurigram 10.21. Weather cloudy and rainy. Cutting and steeping of jute and transplantation of *aman* still going on. Water and fodder sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	9 8	} per rupee.
Gaibanda	...	10 0	
Kurigram	...	9 0	
Nilphamari	...	10 8	

Bogra.—Rainfall at Sadar 4.12. Fall general. Harvesting of jute going on. Prospects good. Fodder and water sufficient. Common rice sells at 12 seers per rupee.

Pabna.—Rainfall at Sadar 3.39, Sirajganj 6.83. Weather cloudy and rainy. Showers general. Prospects of *aman*, *engareans* and *hardi* fair. Fodder sufficient. No cattle-disease. Common rice sells at 10 seers per rupee.

Dacca.—Rainfall at Sadar 2.28, Manikganj 2.66, Munshiganj 2.19, Narayanganj 2.28. Prospects of crops fair. Weather seasonable. Fodder available. No cattle-disease. Common rice sells at 11 seers per rupee.

Mymensingh.—Rainfall at Sadar 2.63, Jamalpur 3.19, Kishorganj 0.79, Netrokona 3.94, Tangail 2.89. Weather seasonable. Jute-steeping continues. *Aman* paddy doing well. Fodder scarce in parts. Water sufficient. No cattle-disease. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	12 0	} per rupee.
Kishorganj	...	11 2	
Jamalpur	...	12 4	
Netrokona	...	12 0	
Tangail	...	10 12	

Faridpur.—Rainfall at Sadar 3.38, Goalundo 4.17, Madaripur 3.19. Weather stormy and rainy. Prospects of crops good. Fodder available. No cattle-disease. Common rice sells at 11 seers the rupee.

Backergunge.—Rainfall at Sadar 6.90. Fall general. Weather seasonable. Transplantation of *aman* progressing. Prospects fair. Cattle-disease reported from thana Matbari, but abating through inoculation. Fodder sufficient. Common rice sells at 18 seers (*aus*) and 12 seers (*aman*) per rupee.

Tippera.—Rainfall at Sadar 1.19, Chandpur 2.43, Brahmanbaria 2.11. Weather seasonable. Prospects fair. Transplantation of *aman* paddy completed. Reaping of jute still going on in Brahmanbaria. *Aman* thriving well. Fodder and water sufficient. No cattle-disease. Common rice sells at 14 seers per rupee.

Noskhal.—Rainfall at Sadar 2.85, Feni 2.07. Fall general. Weather stormy and cloudy. Harvesting of *aus* completed. Transplantation of *aman* nearly finished. Prospects fair. Cattle-disease at Sudharum. Fodder and water sufficient. Common rice sells at Sadar at 12 seers, and at Feni at 13 seers per rupee.

Chittagong.—Rainfall at Sadar 1.27, Cox's Bazar 3.35. Transplantation of *aman dhan* is nearly finished. Water and fodder sufficient. Common rice selling at 12½ seers per rupee.



**Chittagong Hill Tracts**—Rainfall at Sadar 28. Weather fair. Harvesting continues. No cattle-disease. Common rice sells at 13 seers per rupee.

**Patna**—Rainfall at Sadar 5.68, Barh 7.80, Bihar 2.83, Dinapore 5.16, Hilsa 4.12, Bikram 4.45. Weather clear with west wind. Prospect of paddy crops much improved by the recent rain. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Patna	...	12	0
Barh	...	12	0
Bihar	...	10	0
Dinapore	...	12	8

per rupee.

**Gaya**—Rainfall at Sadar 2.79, Jahanabad 3.67, Aurangabad 4.06, Nawadah 2.42. Weather hot in the day and cold in the night. Harvesting of the *Bhadai* crops approaching completion. Paddy doing well so far. No cattle-disease except in a few villages in the Nawadah subdivision. Fodder and water for cattle ample. Average price of common rice is 11½ seers per rupee.

**Shahabad**—Rainfall at Sadar 3.95, Buxar 4.58, Bhabhua 6.79, Sasaram 2.18, Dehri 3.65. Weather seasonable. Harvesting of *bhadai* going on. Sugarcane and paddy doing well. Fodder and water sufficient. No cattle-disease. Rice sells at Sadar at 12 seers a rupee.

**Saran**—Rainfall at Sadar 4.84, Siwan 3.11, Gopalganj 2.42. Weather seasonable. Harvesting of *bhadai* in progress. Paddy and other standing crops doing well. Fodder and water sufficient. No cattle-disease. Common rice sells at 13 seers per rupee.

**Champarn**—Rainfall at Sadar 5.38, Bettiah 2.19. Weather cloudy and rainy. Prospects of standing crops good. Threshing of *bhadai* crops still going on. Ploughing of lands for *rabi* commenced. Cattle-disease reported. Fodder and water sufficient. Common rice sells at 15 seers and maize at 25½ seers per rupee.

**Muzaffarpur**—Rainfall at Sadar 8.67, Hajipur 5.33, Sitamarhi 7.42. Weather generally cloudy. Harvesting of *bhadai* crops continues. Prospects good. Fodder and water sufficient. Prices are—Common rice 14½, and maize 25 seers a rupee.

**Darbhanga**—Rainfall at Sadar 11.04, Samastipur 7.93, Madhubani 8.56. Prospect of standing crops good. Fodder and water sufficient. Cattle-disease is reported from Samastipur and Daisingarai thanas. Common rice sells as follows:—

	Srs.	ch.	Srs.	ch.	
Sadar	...	12	9	14	0
Samastipur	...	12	8	14	0
Madhubani	...	11	11	14	4

per rupee.

**Monghyr**—Rainfall at Sadar 6.08, Begusarai 3.33, Jamui 6.56. Weather very hot, cyclonic latterly. *akai* harvesting nearly completed. *Maua* being harvested. Sowing of chillies and sweet potatoes going on. Paddy crops and sugarcane doing well. Standing crops in Bariarpur outpost in Begusari subdivision reported to be somewhat damaged by Ganges flood. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	11	14
Begusarai	...	12	0
Jamui	...	11	0

per rupee.

**Bhagalpur**—Rainfall at Sadar 4.00, Banka 4.90, Madhipura 11.51, Supaul 4.67. Weather seasonable. Prospects of *ughani* continue fair. Harvesting of *bhadai* nearly finished. Sowing of kharif going on. Fodder and water sufficient. No cattle-disease. Common rice sells as follows:—

	Srs.	ch.	
Sadar	...	11	6
Banka	...	12	8
Madhipura	...	13	8
Supaul	...	16	0

per rupee.

**Parnera**—Rainfall at Sadar 3.79, Kishanganj 14.19, Araria 10.47. Fall general. Jute and *bhadai* are still being harvested. Prospects on the whole good. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

	Srs.	Ch.	
Sadar	...	19	0
Kishanganj	...	11	0
Araria	...	14	0

per rupee.

**Malda**—Rainfall at Sadar 3.33, Gajol 4.63, Sibganj 3.33, Chanchal 4.75. Fall general. Weather—mornings cool, days hot. Prospects of winter rice good. Cutting of jute still

going on. No cattle-disease. Fodder and water sufficient. Common rice sells at  $11\frac{1}{2}$  seers per rupee.

**Sonthal Parganas.**—Rainfall at Sadar 5·89, Deoghar 8·77, Godda 4·80, Jamtara 3·45, Pakaur 5·63, Rajmahal 4·37. Weather rainy. Prospects of standing crops favourable. Harvesting of *aus* continues. Fodder and water sufficient. The market rate of common rice is 13 seers at Sadar.

**Cuttack.**—Rainfall at Sadar 2·80. Fall general. Weather seasonable. Early *beati* being cut. Late *beati* and *srad* progressing well. Prospects fair. Cattle-disease reported from places. Fodder and water sufficient. Common rice sells at  $13\frac{1}{2}$  seers (old) and  $15\frac{1}{2}$  seers (new) per rupee at Sadar.

**Balasore.**—Rainfall at Sadar 1·50. Fall general. *Beati* being harvested and *srad* weeded. Standing crops with sugarcane progressing. Rice sells at 13 and 15 seers a rupee at Sadar and Bhadrak respectively. Fodder and drinking-water sufficient.

**Angul.**—Rainfall at Sadar 0·53, Ohhendipada 0·39, Tikerpara 0·37, Bissipara 1·49. Weather hot and cloudy. Sowing of *rahi* and harvesting of *bhadoi* crops continue. Common rice sells at 13 and  $12\frac{1}{2}$  seers per rupee at Sadar and Khondmala respectively. Fodder and water ample.

**Puri.**—Rainfall 2·50, which is general throughout the district. Weather seasonable. Harvesting of *mandua* and *bhadoi* paddy is nearly over; outturn cent. per cent. Winter rice, sugarcane, and other miscellaneous crops growing well. Fodder and water-supply sufficient. Common rice sells at 15 seers per rupee.

**Hasaribagh.**—Rainfall at Sadar 3·09, Giridih 5·34. Fall general. Cattle-disease reported from two thanas. Harvesting of *bhadoi* going on. Lands being prepared for winter crops. Fodder and water sufficient. Common rice sells at  $14\frac{1}{2}$  seers per rupee.

**Ranchi.**—Rainfall at Sadar 2·10. Weather seasonable. Harvesting of *bhadoi* paddy and sowing of *sirgaja* in progress. Cattle-disease reported from Ranchi, Silli and Karra thanas. Fodder and water sufficient. Average price of common rice is 15 seers per rupee.

**Palamu.**—Rainfall at Sadar 5·83. Weather seasonable. *Bhadoi* harvesting continues. Sugarcane and rice crop doing well. Cattle-disease in a few places. Fodder and water sufficient. Prices at Sadar are—Rice  $11\frac{1}{2}$  seers, and maize 26 seers per rupee.

**Manbham.**—Rainfall at Sadar 9·84, Gobindpur 4·22. Fall general except in thana Katras. Weather seasonable. Prospects of crops good. Fodder and water sufficient. Cattle-disease not reported. Average price of common rice at Sadar is 12 seers, and at Gobindpur 10 seers 14 chitaks per rupee.

**Singhbhum.**—Rainfall 3·66. Prospect of crop excellent. Harvesting of *gora* paddy continues. Average price of rice is 12 seers 10 chitaks per rupee in the district; at Chaibasa 12 seers per rupee.

**General Summary.**—The rain fall during the week was general and heavy at places. In parts of North Bengal the fall was excessive. More rain is required in Burdwan and parts of Midnapore and the 24-Parganas. Crops in one outpost of the Begusarai subdivision of the Monghyr district are reported to be somewhat damaged by flood. Sugarcane doing well. Harvesting of *bhadoi* crops approaching completion. Transplantation of winter rice is almost over and weeding has commenced at places. Prospects fair. Cattle-disease reported from 11 districts. Fodder and water generally sufficient. The price of common rice has risen in 5 districts, fallen in 11, and is stationary in the rest (31).

By order of the Lieutenant-Governor of Bengal,

W. C. MACPHERSON,

Offg. Secretary to the Govt. of Bengal.

REVENUE DEPARTMENT,

The 30th September 1902.